



CLEMSON NEWSLETTER

INFORMATION FOR THE STAFF OF CLEMSON UNIVERSITY

Vol. 11 No. 1

August 15, 1971

UNIVERSITY AWARDS 1,452 DEGREES DURING ACADEMIC YEAR

Clemson University awarded 360 degrees, including 168 advanced degrees, at summer sessions commencement Aug. 7. President Robert C. Edwards conferred 191 bachelor's degrees, one associate in arts degree, 151 master's degrees and 17 doctorates. Including graduation ceremonies last December and in May, the University awarded 1,452 degrees during academic year 1970-71.

ROCHESTER NAMED DIRECTOR OF PHYSICAL PLANT

Roy M. Rochester, plant engineer with the University's Physical Plant Division since 1962, has been named director of the Division. Rochester succeeds Ralph S. Collins who has held the position for the past 12 years. Collins has accepted the job of vice president for engineering and construction with Palmetto Dune Resort Inc. at Hilton Head Island.

In his new capacity, Rochester will administer one of the largest units at the University. The Physical Plant Division, which employs about 310 full-time persons, is responsible for all campus utilities, buildings, planning and engineering, grounds, security (police and fire departments), as well as new construction.

ANDERSON NAMED HEAD OF DEPARTMENT OF AGRONOMY AND SOILS

Dr. Luther P. Anderson has been named head of the University's Department of Agronomy and Soils, effective August 16. He succeeds Dr. U.S. Jones who is returning to full-time teaching and research in that department.

Presently State Leader of Extension Agricultural Programs, Dr. Anderson has been prominent in state educational work since 1958 when he came from Bishopville to become assistant Extension agronomist. Agronomy deals primarily with the soil and plant sciences relating to field crops whose farm value in S.C. exceeded \$230 million in 1970. In his new role, Dr. Anderson will coordinate all teaching, research, and extension activities for the agronomy department.

Dr. G.R. Craddock, Professor of Agronomy and Soils, has been named acting head until Dr. Anderson assumes his new duties.

SCSEA CREDIT UNION REDUCES RATES ON AUTO LOANS

Members of the State Employees' Association may join the Association's Credit Union by paying a lifetime registration fee of \$1 and depositing a minimum of \$5 (one share). Loans are made on new cars, up to three-fourths of the list price of the car, at a rate of $3/4$ of 1 per cent per month on the unpaid (continued on page 2)

SCSEA CREDIT UNION REDUCES RATES ON AUTO LOANS Continued

balance, and may be arranged from 12 to 36 months. There are only two other costs: (1) an investigation fee of \$1 on the initial loan, and (2) documentary tax stamps, at 4¢ per \$100. Adequate insurance must be purchased, but may be purchased from any licensed company. Personal loans are also made to members, after one year, at 1 per cent per month of unpaid balance, up to \$500. Minimum monthly installment is \$25. Further information is available from the Credit Union Office (256-2097), 2414 Bull St., Columbia.

CREDIT FOR OUT-OF-STATE SERVICE: S.C. RETIREMENT SYSTEM

Late in 1970-71, State laws affecting credit for employment with a State, county, municipality, or school district outside South Carolina were liberalized in two important respects: (1) No longer must this service be continuous; and (2) The out-of-state service no longer must include employment immediately before S.C. employment began. (To illustrate: If you were in graduate school, or working in private business, during the four years just before coming to work with Clemson, but taught in a public school in Texas for three years earlier, you may now register those three years for full credit in the S.C. Retirement System, provided payment is made therefor, and other requirements are met). Federal service is still excluded and service as a State (S.C. employee, by the date of retirement, must be twice the time brought in. Time while a student in another state is excluded. For further details, see your Department Head, and ask for Personnel Letter 31.

TAX-SHELTERED ANNUITIES

Arrangements may be made for the University to divert a portion of your salary to a "tax deferred annuity." Arrangements for (a) new program, (b) transfers, and/or (c) changes must be completed on or before August 31, 1971 if they are to apply to 1971-72 earnings. (New employees may complete arrangements within first 30 days at Clemson.) Employees on year-round salary may authorize 12 reductions, from September through August; academic year employees may authorize eight, from September through April. Unless completed contracts are received before 4:30 p.m., August 31, 1971, by Mr. W.J. Stamey, in the Personnel Office (Ground Floor, Tillman) they cannot apply in 1971-72. If you plan to participate, see your insurance company representative well before the closing date.

SOUTH CAROLINA STATE EMPLOYEES' ASSOCIATION

A majority of the regular employees of the State are members of the State Employees' Association. Annual dues (\$3 to \$10) are related to salary levels. Since last July, the Association has added a group life insurance plan, also related to salary levels, with premium increases at ages 30, 40, 50, and 60. This new program is available with or without the basic "hospital, surgical, life, accident" package which has been offered for more than 20 years through Pilot Life. Full information from Personnel Office, or the SCSEA, Box 5357, Columbia.

EXEMPTIONS CLAIMED FOR FEDERAL INCOME TAX WITHHOLDING

Recently the U.S. Internal Revenue Service reminded all employees subject to withholding (a) that in 1971, an employee who expects to earn less than \$1,700 during (Continued on next page.)

Baltimore, Md.

, N. C.

Buckram No. AAB 598	Rub Enclosed
Pamphlet No.	New Title; Keep Rub
Top	Do Not Keep Rub
Top	Stub For
Index	Use Bench Sewing
Bind in Issues	Refold Plates Before Trimming
Covers	Mount on Guards
Strip Ads in all but 1st No.	Book Rate
Strip Ads in all Nos.	
Special Instructions	

USE GOLD LETTERING

vol. 11 nos. 1-24
Aug. 15, 1971
- Aug. 1, 1972

This Vol. Letter Spine Exactly as Shown Below

CLEMSON
NEWSLETTER

11

AUG. 15, 1971
AUG. 1, 1972

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Woodell 4338-Rev

(College of Architecture) and Associate Professor of Architecture.

Towers' primary responsibilities will be as Master Planner. The new position is a 12-month joint appointment by the Office of Development and the College of Architecture.

The Master Planning Office, budgeted by the Office of Development, will provide recommendations for continuing design development and planning of the University campus, location of buildings, roads, pedestrian walkways, parking areas, sports and recreation facilities, campus graphics, and maintenance of a Campus Plan Model.

Towers received the master of landscape architecture degree from the University of Pennsylvania ('60) and has eight years experience in teaching and professional practice in landscape architecture and site planning.

The Master Planning Office, which reports directly to the Vice President for Development on all matters concerning master planning, will be available for planning assistance on requests transmitted through and approved by the Vice President for Development.

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Form 1040-ES, Declaration of
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TOWERS OF AMERICA FOR 1971

n Outstanding Educators of
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professor of mechanical engineering;
iversity research and associate
alumni professor of economics.

electrical and computer
gricultural economics and rural
of history; James H. Hobson,

y; Lyle C. Wilcox, associate dean
al and computer engineering de-
ineering; and Samuel F. Hulbert,
disciplinary programs, associate
division of interdisciplinary

d Clemson graduate (bachelor of
in the new Master Planning Office

August 15, 1971

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EXEMPTIONS CLAIMED FOR FEDERAL INCOME TAX WITHHOLDING Continued

the year may eliminate withholding for Federal income tax by filing a special Form W-4E, and (b) that employed husband-and-wife teams who plan to make joint returns for 1971 may wish to reduce the number of exemptions claimed to avoid an excessive tax payment when the couple files a Federal income tax return for 1971. Those who plan to make such adjustments must assume complete responsibility for exemptions claimed, and should consult IRS agents or other authorities. Clemson University will continue to process Form W-4, or Form W-4E, as filed by each employee. These forms are available in the office of each Department Head.

If a Form W-4 claiming zero exemptions does not produce adequate pre-payment through withholding to avoid an excessive payment upon filing the return for 1971, the employee should investigate the use of Form 1040-ES, Declaration of Estimated Tax, which is required by law of many employees.

UNIVERSITY PROFESSORS SELECTED AS OUTSTANDING EDUCATORS OF AMERICA FOR 1971

Ten University faculty members have been chosen Outstanding Educators of America for 1971, on the basis of their civic and professional achievements.

They include: Jarrett C. Hester, associate professor of mechanical engineering; Arnold E. Schwartz, dean of graduate studies and university research and associate professor of civil engineering; Hugh H. Macaulay, alumni professor of economics.

Also, James N. Thurston, alumni professor of electrical and computer engineering; James M. Stepp, alumni professor of agricultural economics and rural sociology; Ernest M. Lander, Jr., alumni professor of history; James H. Hobson, alumni professor of chemistry.

Also, John W. Huffman, professor of chemistry; Lyle C. Wilcox, associate dean for professional studies and acting head, electrical and computer engineering department, professor of electrical and computer engineering; and Samuel F. Hulbert, associate dean for engineering research and interdisciplinary programs, associate professor of materials engineering, acting head, division of interdisciplinary studies.

TOWERS NAMED MASTER PLANNER

F. Wayne Towers, native of Hammond, Ind., and Clemson graduate (bachelor of architecture, '58), has been named Master Planner in the new Master Planning Office (College of Architecture) and Associate Professor of Architecture.

Towers' primary responsibilities will be as Master Planner. The new position is a 12-month joint appointment by the Office of Development and the College of Architecture.

The Master Planning Office, budgeted by the Office of Development, will provide recommendations for continuing design development and planning of the University campus, location of buildings, roads, pedestrian walkways, parking areas, sports and recreation facilities, campus graphics, and maintenance of a Campus Plan Model.

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The Master Planning Office, which reports directly to the Vice President for Development on all matters concerning master planning, will be available for planning assistance on requests transmitted through and approved by the Vice President for Development.

AGRICULTURAL EDUCATION

J. A. Hash (Assoc Prof) and R. T. Benson (Asst Prof, Voc Educ Media Ctr) served as Chairman and Secretary, respectively, of the 20th Annual Southern Research Conference at the Holiday Inn, July 28-30. All 13 states in the region except Georgia were represented. In addition, New York and Ohio were represented by invited speakers on the program. Fourteen major papers on research and/or development were presented during the two and one-half day conference. J. H. Rodgers (Prof) and R. H. White (Exec Secy, Advisory Council on Voc Ed) were two of five formal discussants on the program. E. T. Carpenter (Prof and Hd) chaired the first session; H. F. Landrith (Dean) and W. H. Wiley (Dean, Col of Agr Sci) chaired the third and fourth sessions of the conference. A total of 34 participants registered for the meeting.

AGRONOMY

J. R. Woodruff (Asst Prof) presented S. C. report on Soil Test Calibration work at the S-52 Technical Committee Meeting, University of Arkansas, June 23-24.

G. R. Craddock (Prof) presided at the annual South Carolina Chapter meeting of the Soil Conservation Society of America on June 11.

ECONOMICS

H. H. Macaulay (Alumni Prof) lectured on July 15 and 16 at the NSF Institute for College Teachers of Economics held at the University of South Carolina.

ENGLISH

Harriet Holman (Prof) published "F. Marion Crawford and the Evil Eye" in the March issue of American Notes and Queries.

ENTOMOLOGY AND ECONOMIC ZOOLOGY

T. R. Adkins, Jr. (Prof) attended the organizational meeting of Project NEC-13, "Biting Fly Research," in Philadelphia, Pa., June 8-10. Dr. Adkins was elected chairman of the committee.

Mobil Chemical Company has given a \$300 grant-in-aid to this department for research with MOCAP and MC-4044. R. F. Nash (Asst Prof) will direct this research on ornamental pests.

ENTOMOLOGY AND ECONOMIC ZOOLOGY (Continued)

Shell Chemical Company has given to the department a grant-in-aid of \$500 to be used in testing Shell products against insects affecting man and animals. This work will be performed under the direction of T. R. Adkins, Jr.

Mobil Chemical Company has given a \$600 grant-in-aid to the department for research with MC-4044. This is to support research work by G. R. Carner (Asst Prof) on the plum curculio on peaches and by T. E. Skelton (Assoc Prof) on apple insects.

ENGINEERING

L. G. Rich (Dean) was a member of the ad hoc Educational Policy Committee of the American Association of Professors in Sanitary Engineering which met in Denver, Colo. on July 26-28.

J. L. Edwards (Asst to the Dean) has been appointed a member of the National Membership Policy Committee of the American Society for Engineering Education for the period 1971-74.

ENVIRONMENTAL SYSTEMS ENGINEERING

The ESE department conducted an eight-day workshop, July 21-28 for the three technical education centers in S. C., Md., and Oregon who will be implementing the two-year post high school wastewater technology training program recently developed by the Environmental Systems Engineering Dept.

MATHEMATICAL SCIENCES

T. G. Proctor (Assoc Prof) and G. W. Marrah (Grad Stu) presented a paper entitled "Periodic Properties of Solutions of Some Stieltjes Integral Equations," at the 1971 SIAM meeting, June 28 in Seattle, Wash.

John Kenelly (Prof and Hd) served as the Examination Leader for the Advanced Placement Calculus (BC) Examination for the Educational Testing Service, at Princeton, N. J. from June 15-18.

John Kenelly and W. R. Hare (Assoc Prof) were invited participants at the NSF sponsored Regional Conference on Combinatorial Problems in Geometry at the University of Oklahoma from June 21-25. Research contained in their dissertations was presented in invited papers by Marilyn Breen, "Determination of a Polytope from Radon Partitions," and Arthur Sparks, "Theorems Concerning the Generalized Convex Kernel."

PHYSICS

M. J. Skove (Prof) has received a two-year grant from NSF for \$34,200 to carry out a research program entitled "Superconductivity in Whiskers."

D. R. Overcash (former Grad Stu), M. J. Skove and E. P. Stillwell (Prof) have published a paper entitled "Fermi-Surface Topology Changes in Alloys Deduced from the Behavior of T_c Under Strain" in the June issue of the Physical Review.

T. L. Ferrell (former Grad Stu) has published a paper entitled "Hamilton-Jacobi Perturbation Theory" in the June issue of American Journal of Physics. This work was done under the direction of J. L. Ging (Assoc Prof).

J. R. Ray (Assoc Prof) presented a paper entitled "A Tachyon Dust Metric in General Relativity" at the Sixth International Conference on Gravitation and Relativity held in Copenhagen on July 5-11. Joe Foster (Grad Stu) was co-author of the paper.

M. J. Skove recently gave seminars at West Georgia College and S. C. State College.

Raymond Turner (Asst Prof) presented a seminar entitled, "An Introduction to Electron Spin Resonance and its Application to Polymers" at American Enka Corp., Enka, N. C.

W. E. Gettys (Assoc Prof) spent the summer at the Savannah River Laboratory in Aiken doing research on neutron scattering problems.

F. J. Keller (Assoc Prof) spent the summer at the Naval Research Laboratory in Washington, D. C., researching the possibility of using color centers in the alkali halides as computer memory devices.

T. F. Collins (Asst Prof) spent two months of the summer at the University of Florida completing the requirements for the Ph.D. degree.

TEXTILE DEPARTMENT

H. M. El-Behery (Assoc Prof) attended an NSF sponsored Summer Institute in Polymer Science at the University of Massachusetts, Amherst, Mass., June 6 - July 30.

NEW FACULTY AND STAFF 1971-72

The following members of the faculty and staff joined the University between August 15, 1970 and August 16, 1971.

College of Agricultural Sciences

Adams, Donald S., Chemist I; B. A., California State College; Married, two children; 215 Wesley Street

Backman, Paul A., Plant Pathologist (USDA); B.S., Ph.D., University of California, Davis; Married, one child; 8-A Daniel Drive

Barth, Clyde L., Associate Professor of Agricultural Engineering; B.S., University of Illinois; M.S., Ph.D., University of Wisconsin; Married, four children; 205 Wren Street

Beasley, Lynn W., Assistant Extension Specialist (Community and Resource Development) Greenwood; B.S., Louisiana Tech University; M.S., Louisiana State University; Married; Upper Savannah Economic Development District, 1200 Edgefield Street, Greenwood 29640

Brown, Ralph T., Jr., Assistant Extension Specialist (Community and Resource Development) Georgetown; B.A., Washington & Lee University; Juris Doctor, Washington & Lee University; Married; Waccamaw Planning Commission, Georgetown 29440

Clinkscales, William C., Assistant Extension Specialist (4-H Club Work); B.S., South Carolina State College; Married, three children; Pendleton Highway

Curry, Andrew J., Jr., Experiment Station Editor; A.B.J., University of Georgia; Married; 505 Sycamore Drive, Anderson 29621

Fearrington, Doris B., Associate Extension Specialist (Nutrition) Sandhill Experiment Station, Columbia; B.S., Winthrop College; M.S., Simmons College, Harvard School of Public Health; Married, one child; Sandhill Experiment Station, Box 1771, Columbia 29202

Holleman, K. A., Extension Specialist (Poultry Science) Principal Specialist; B.S., Texas A & M University; M.S., University of Nebraska; Ph.D., University of Missouri; Married, two children; 168 Pendleton Road

Holton, Harriette E., Assistant Radio-TV Editor; B.S., Limestone College; Single; 9-A Daniel Drive

Howell, Nelda K., Associate District Agent, Piedmont District; B.S., East Carolina University; M.Ed., North Carolina State University; Single; P.O. Box 1381, Clemson

Hudson, Larry W., Associate Extension Specialist (Animal Science); B.S., Berea College; M.S., Ph.D., University of Kentucky; Married, one child; Route 3, Heatherwood, Central 29630

NEW FACULTY AND STAFF 1971-72 (Continued)

Hughes, Buddy Lee, Associate Specialist (Poultry Science); B.S., Clemson University; M.S., Ph.D., Oregon State University; Married, two children

Jackson, H. B., Jr., Supervisor, Plant Pest Regulatory Service; B.S., Clemson University; M.S., Auburn University; Ph.D., Oklahoma State University; Married, two children; 108 Ridgeview Drive

Johnson, Michael G., Assistant Professor of Food Science; B.S., M.S., University of Illinois, Urbana; Ph.D., University of California, Davis; Married; 11-A Lee Street

Jones, Joe K., District Agent, Piedmont District; B.S., Clemson University; Married, three children

Jordan, Johnny W., Assistant Extension Specialist (Agricultural Economics); B.S., M.S., Auburn University; Married, one child; 700-B Maynard Street, Florence 29501

Lawrence, Carolyn D., Chemist I; B.S., Lander College; Married

Miller, Robert W., Associate Extension Specialist (Plant Pathology); B.S., University of Delaware; M.S., University of Arizona; Ph.D., University of Delaware; Married, one child; Florence 29501

College of Architecture

Addison, Clarence L., Instructor of Building Science; B. Arch, Howard University; Married, two children

Clark, Jack L., Associate Professor of Building Science; B. Arch., University of Florida; M.S., M.A., Bradley University; Ph.D., Lawrence University; Married, two children; 108 Princess Drive

McPeak, Thomas E., Associate Professor and Head of History and Visual Studies; B.F.A., Washburn University of Topeka; M.F.A., University of Kansas; Married, six children; 108 Karen Drive

Towers, Frederick W., Associate Professor of Architecture and Campus Planner; B. Arch., Clemson University; M.L.A., University of Pennsylvania; Married, two children; 106 Fort Rutledge Road

Turner, Thomas G., Jr., Instructor of History and Visual Studies; B.S., Illinois State University; Married; 224 North Clemson Avenue

College of Education

Adair, Joseph H., Visiting Instructor in Education; A.B., B.D., Johnson C. Smith University; M.Ed., Furman University; Married, one child

NEW FACULTY AND STAFF 1971-72 (Continued)

Boatman, Kenneth W., Assistant Professor of Military Science; B.S., Peru State College; Married, one child

Briscoe, Carolyn Ida, Assistant Professor of Education; A.B., LaGrange College; M.Ed., S.Ed., Ed.D., University of Georgia; Single

Grant, Robert C., Assistant Professor of Aerospace Studies; B.S., Clemson University; M.S., Southern Methodist University; Married, three children

Matthews, E. James, Associate Professor of Education; B.S., M.Ed., Ed.D., University of Florida; Married, three children

Olive, F. Edward, Assistant Professor of Education; B.A., Louisiana Tech; M.Ed., Louisiana State University; Ed.D., Auburn University; Married, three children

West, G. Sharon, Visiting Instructor in Education; B.S., Ohio University; M.Ed., Ohio State University; Married, two children; P. O. Box 268, Route 2, Seneca

College of Engineering

Akkas, Nuri, Assistant Professor of Civil Engineering; B.S., Robert College, Istanbul, Turkey; M.S., Ph.D., Clemson University; Married

Beard, John N., Jr., Assistant Professor of Chemical Engineering; B.S., University of South Carolina; M.S., Ph.D., Louisiana State University; Married, three children; 257 Riggs Drive

Cooke, Francis W., Associate Professor of Materials Engineering and Bio-engineering; B.S., Notre Dame University; Ph.D., Rensselaer Polytechnic Institute; Married, four children; 501 Fife Drive

Dixon, Marvin W., Assistant Professor of Mechanical Engineering; B.S., M.S., Louisiana State University; Ph.D., Northwestern University; Married, one child; 107 Clarendon Drive

Gowdy, John N., Assistant Professor of Electrical and Computer Engineering; B.S., Massachusetts Institute of Technology; M.S., Ph.D., University of Missouri at Columbia; Married; 202-B Pine Street

James, Gerald E., Assistant Professor of Environmental Systems Engineering; B.S., University of Alabama; Ph.D., Purdue University; Married; #4 College Heights Boulevard

Law, E. Harry, Assistant Professor of Engineering Mechanics; B. Aero. Engineering, Rensselaer Polytechnic Institute; M.S.E., Princeton University; Ph.D., University of Connecticut; Married; #2-B Palmetto Boulevard

Love, Jackson S., Jr., Assistant Professor of Civil Engineering; B.S., Carnegie-Mellon Tech; M.S., Penn. State; Married, one child

NEW FACULTY AND STAFF 1971-72 (Continued)

Moyle, David Douglas, Assistant Professor of Materials Engineering and Bio-engineering; B.S., Wilkes College; Ph.D., Rensselaer Polytechnic Institute; Married, two children; Route 3, Central

Ponder, Wade H., Training Coordinator; B.S., M.S., Clemson University; Married, two children; 105 Pressley Drive

College of Forest and Recreation Resources

Malcolm, Anthony D., Agricultural Science Associate II, Dept. of Forestry; B.S., M.F., University of Georgia; Married; P.O. Box 1169, Clemson

White, Charlie R., Assistant Professor, Recreation and Park Administration; B.S., North Carolina State; M.S., Indiana University; Married; 315 Tamassee Drive

College of Industrial Management and Textile Science

Barnett, Andy H., Instructor in Economics; B.A., Presbyterian College; M.A., Clemson University; Married

Byerley, Neil E., Assistant Professor of Industrial Management; B.S., B.A., University of Tennessee; Married, four children

Dudley, Sid C., Assistant Professor of Industrial Management; B.A., Mississippi State University; MBA, University of Arkansas; Single

Himsworth, Francis R., Visiting Professor in Industrial Management; B.S., Ph.D., Edinburgh University; Married, two children

Johnson, Bettye B., Instructor in Industrial Management; B.S., M.S., Mississippi State University; Married; 208 Calhoun Street

Powers, Edward L., Assistant Professor of Industrial Management; B.S., MBA, West Virginia University; Ph.D., University of South Carolina; Married, one child; 19-B Daniel Drive

Rueter, Frederick H., Assistant Professor of Economics; B.S., M.S., Carnegie Institute of Technology; Married

Velez, Alejandro, Instructor in Economics; B.A., American University; M.A., University of Florida; Married, two children

Wilson, Thomas H., Assistant Professor of Industrial Management; B.A., M.A., Texas Christian University; Married, three children

NEW FACULTY AND STAFF 1971-72 (Continued)College of Liberal Arts

Austin, Mrs. Marilyn A., Instructor in Psychology; B.A., Muskingum College; M.S.W., University of Illinois; Married, 4 children; 102 Lakeside Court

Bettich, Heinrich R., Instructor in English; B.A., Florida Atlantic University; M.A., University of North Carolina; Married, two children

Coulter, Edwin M., Assistant Professor of Political Science; B.A., Furman University; Ph.D., University of Virginia; Married, two children; 272 Pendleton Rd.

Copenhaver, James K., Acting Instructor in Music and Acting Assistant Director of Bands; B.A., M.M.Ed., Morehead State University; Single

Fleishman, Mrs. Helen M., Assistant Professor of Sociology; B.S., M.S., University of Utah; Married, three children; 1216 Briarwood, Anderson

Fleming, Horace W., Jr., Instructor in Political Science; B.A., M.A., University of Georgia; Married; 36-B Daniel Drive

Hinkle, Mrs. Barbara R., Instructor in Psychology; B.A., M.Ed., Clemson University; Married, two children; Route 2, Central

King, Samuel C., Assistant Professor of Spanish; B.A., M.A., Louisiana State University; Married, one child; Robin Hill Apartments

Lunsford, Ronald F., Instructor in English; B.A., M.A., University of North Carolina; Married

Marx, David J., Assistant Professor of Psychology; B.S., M.A., Loyola University; Single

Montgomery, Charles L., Jr., Instructor in Speech; B.S., M.A., Ball State University; Married

Poster, Gerbrand, III, Instructor in English; B.A., University of the South; M.A., Rice University; Married; 22-A Barre Street

Rudowski, Victor A., Assistant Professor of English; B.A., Union College; Ph.D., Harvard University; Single; Clemson House

Shernock, Stanley Kent, Instructor in Sociology; B.A., University of California, Berkeley; M.A., Indiana University; Married; 206 Skyview Drive

Stewart, Harry E., Head of Department of Languages and Professor of French; B.A., DePauw University; M.A., Ph.D., Indiana University; Married, two children; 510 Shorecrest Drive

Turner, Joe M., Instructor in Sociology; B.A., M.A., Western Kentucky University; Married, three children; Royal Acres Trailer Court

Williams, Mrs. Georgia A., Lecturer in German; B.A., Clemson University; Married, one child; 303 Edgewood Avenue

NEW FACULTY AND STAFF 1971-72 (Continued)School of Nursing

Blanford, Claudia Maria, Instructor; B.S.N., East Carolina University; M.N., Emory University

Duvall, Arline Marie, Associate Professor; B.S.P.H.N., University of North Carolina; M.P.H., University of Michigan

Higgins, Julia Hill, Instructor; B.S.N., Emory University; M.N., Emory University

Kelly, Mary Ann, Instructor; A.B., San Francisco State College; M.S., University of California at San Francisco

Leahy, Cynthia Anne, Instructor; B.S.N., University of Miami; M.S.N., Emory University

Teklits, Mary Ann, Instructor; B.S., St. Joseph College; M.N., Emory University

College of Physical, Mathematical, and Biological Sciences

Bookmyer, Beverly B., Associate Professor of Physics; A.B., Chestnut Hill College; M.S., Ph.D., University of Pennsylvania; Widow, two children

Bronk, Burt V., Associate Professor of Physics; B.S., Pennsylvania State University; Ph.D., Princeton University; Married, three children

Payne, James E., Assistant Professor of Physics; B.S., Hampden-Sidney College; M.S., Clemson University; Married

Pomfret, James S., Assistant Professor of Mathematics; B.S., Bates College; M.S., New Mexico State University; Ph.D., University of Oklahoma; Married, one child

Walker, Richard Francis, Assistant Professor of Zoology; B.S., Rutgers University; M.S., New Mexico State University; Ph.D., Rutgers University; Married, one child

Zimmer, Jack A., Assistant Professor of Mathematics; B.A., M.A., University of Nebraska; Ph.D., University of Waterloo

Zimmerman, James K., Assistant Professor of Biochemistry; B.S., University of Nebraska; Ph.D., Northwestern University; Married, two children

Computer Center

Holman, James R., Asst. Statistician & Asst. Prof. of Exp. Statistics; B.S., Tenn. Tech. University; Ph.D., Clemson; Married, one child; 104 Pressley Drive

Peck, John C., Asst. Professor of Mathematics & Computer Analyst; B.S., M.S., Ph.D., University of Southwestern Louisiana; Married, one child; P.O. Box 457, Central

NEW FACULTY AND STAFF 1971-72 (Continued)The Robert Muldrow Cooper Library

Gower, Virginia Lee, Reference Librarian, Science Technology and Agricultural Division; B.A., Furman University; M.Ln., Emory University; 5-B Lee Street

Clemson University at Greenville TEC

Day, Alan S., Instructor in Chemistry; B.S., Hampden-Sydney; Ph.D., Clemson University; Married; Shorecrest Apartment #2

Clemson University at Sumter

Campbell, James A., Instructor in History; A.B., Erskine College; M.A., University of South Carolina; Married, two children; 1026 Robin Hood St., Sumter

Varner, John T., III, Instructor in Mathematics; B.S., Wofford College; M.A., University of Tennessee; Married, one child

Public Relations

Gerlach, Gerald G., Photographer, Communications Center; Single; 119 Sloan St.

Turner, Joseph J., Jr., Alumni Field Representative, Alumni Relations Department; B.S., Clemson University; Single

Student Affairs

Carter, Mrs. Martha Heckerman, Head Resident, Student Affairs; B.A., Wake Forest

Dooley, Mrs. Susan Carson, Head Resident, Student Affairs; B.S., Radford College

Hair, Mrs. Rebecca McDaniel, Head Resident, Student Affairs; B.A., Queens College

Mulkeen, John F., Counselor, Counseling Center; B.S., Fitchburg State College; M.A., San Francisco State University; Ed.D., Arizona State University; Married

Satterfield, Steve M., Head Freshman Football Coach, Athletics; B.A., University of South Carolina; M.Ed., Appalachian State University; Married

Wolfe, Miss Judith Wright, Head Resident, Student Affairs; B.A., University of North Carolina at Greensboro

CALENDAR OF CAMPUS EVENTS

Aug.	16	Mon.		Orientation - new students.
Aug.	16	Mon.	10:30 a.m.	General faculty and staff meeting - Tillman Auditorium.
Aug.	17	Tues.		Orientation new students.
Aug.	18	Wed.		Registration, all students.
Aug.	19	Thurs.		Late registration.
Aug.	20	Fri.		Classes begin, regular schedule.
Aug.	23	Mon.	5:00 p.m.	Senior and graduate student placement orientation meeting, Brackett Hall Auditorium.
Aug.	26	Thurs.	8:00 p.m.- 9:30 p.m.	President and Mrs. Edwards - "At Home" to the faculty and staff.
Aug. Sept.	28- 20	Sat.- Mon.		Architectural exhibit - "Concepts Toward A New Urbanism-Paolo Soleri" -- Lee Hall Gallery.
Sept.	2	Thurs.	8:00 p.m.	Graduate wives' monthly meeting - YMCA.
Sept.	2	Thurs.	3:45 p.m.	Women's Club Reception for Newcomers, Clemson House.
Sept.	6	Mon.	7:00 p.m.	Foreign film, <u>Miguelin</u> (Spanish), Daniel Hall Theatre - free.
Sept.	8	Wed.	7:00 p.m.	Fort Hill Clemson Club - Summer Shrimp & Dip, Wilson's Landing.
Sept.	8	Wed.	8:00 p.m.	Clemson University Newcomers Club - Clemson House.
Sept.	11	Sat.	1:30 p.m.	Varsity Football - Kentucky at Clemson (Band Day).
Sept.	11	Sat.		CDA Concert.
Sept.	13	Mon.	7:00 p.m.	Foreign film, <u>Les liaisons dangereuses</u> (French), Daniel Hall Theatre - free.
Sept.	15	Wed.	10:00 a.m.	Industrial Management and Textile Science Seminar Series - Mr. Raymond Shockley, Vice President and Executive Director of S.C. Textile Manufacturers Association, Columbia, S.C. -- Sirrine Hall Aud.
Sept. Sept.	17- 18	Fri.- Sat.		Southeastern Invitational Conference on Measurement in Education, co-sponsored by Clemson University and Harcourt Brace Jovanovics, Test Department - Clemson House.
Sept.	18	Sat.		No football game.
Sept.	18	Sat.		Soccer - Warren Wilson.

CALENDAR OF CAMPUS EVENTS Continued

Sept.	20	Mon.		Jewish New Year.
Sept.	24- Oct.	Fri.- 20		Architectural exhibit - "Ceramics By Tom Turner" - Lee Hall Gallery.
Sept.	24	Fri.	2:00 p.m.	Freshman Football - Duke at Durham, N.C.
Sept.	24	Fri.		Continuing Engineering Education - High School Teachers Workshop (Interactive Computing) - Riggs Hall.
Sept.	25	Sat.	1:30 p.m.	Football - Georgia at Clemson.
Sept.	25	Sat.		Soccer - at Jacksonville.
Sept.	25	Sat.		Cross Country at Stone Mt., Ga.
Sept.	25	Sat.		CDA Concert.
Sept.	27	Mon.	7:00 p.m.	Foreign film, <u>The Devil Strikes at Night</u> (German), Daniel Hall Theatre - free.
Sept.	28- Oct.	Tues.- 19		Architectural exhibit - "Fantastic Realism-Contemporary Prints" - Lee Hall Gallery.
Sept.	28- Oct.	Tues.- 1		Continuing Engineering Education - Water and Wastewater Treatment Plant Operators School - Classes to be held at Clemson University at Sumter and Sumter TEC.
Sept.	29	Wed.	11:15 a.m.	Agronomy - Dr. A.B. Phillips, Tennessee Valley Authority, Muscle Shoals, Ala. - Production, Marketing and Use of Phosphate Fertilizer I. A-203 P&AS Building.
Sept.	29	Wed.		Soccer - Appalachian State.
Sept.	29	Wed.		Jewish Yon Kippur.
Sept.	29- Oct.	Wed.- 1		Second Annual Clemson Reading Conference, "Right on With Reading," dealing with guidance, research, and class- room instruction - Godfrey Hall.
Sept.	30	Thurs.	11:15 a.m.	Agronomy - Dr. A.B. Phillips, Tenn. Valley Authority, Muscle Shoals, Ala. - Production, Marketing and Use of Phosphate Fertilizer II - A-203 P&AS Bldg.
Oct.	2	Sat.	2:00 p.m.	Football - Clemson vs. Georgia Tech at Atlanta, Ga.
Oct.	2	Sat.		Cross Country - at Ga. Tech.
Oct.	4	Mon.	2:00 p.m.	Freshman Football - Georgia at Clemson.
Oct.	4	Mon.		Cross Country - Furman.
Oct.	4	Mon.	7:00 p.m.	Foreign film, <u>All About Love (De l'amour)</u> (French), Daniel Hall Theatre - free.

CALENDAR OF CAMPUS EVENTS Continued

Oct.	6	Wed.		Seminar, Continuing Engineering Education, Operations Research, Riggs Hall.
Oct.	7	Thurs.	8:00 p.m.	Graduate wives' monthly meeting - YMCA.
Oct.	7-	Thurs.-		Little Theatre - Food Industries Theatre - "You Know
Oct.	9	Sat.		I Can't Hear You When The Water Is Running."
Oct.	8	Fri.		Soccer - Maryland at College Park, Md.
Oct.	9	Sat.	2:00 p.m.	Football - Clemson vs. Duke at Norfolk, Va. (Oyster Bowl).
Oct.	9	Sat.		Cross Country - Duke and USC at Columbia.
Oct.	10	Sun.		Soccer - Virginia at Charlottesville.
Oct.	11	Mon.	2:00 p.m.	Freshman Football - Georgia Tech at Clemson.
Oct.	11	Mon.		Cross Country - N.C. State.
Oct.	13	Wed.	10:00 a.m.	Industrial Management and Textile Science Seminar Series - R. Roy Pearce, Vice President, Consolidated Foods, Inc., Columbia, S.C. - Sistine Hall Auditorium.
Oct.	13	Wed.		Seminar, Continuing Engineering Education, Working With Digital Electronics, Riggs Hall.
Oct.	16	Sat.		Soccer - Emory at Atlanta.
Oct.	16	Sat.		Cross Country - University of North Carolina.
Oct.	16	Sat.	1:30 p.m.	Football - Clemson vs. Virginia at Richmond, Va. (Tobacco Bowl).
Oct.	18	Mon.	7:00 p.m.	Foreign Film, <u>A Summer to Remember</u> (Russian), Daniel Hall Theatre - free.
Oct.	18-	Mon.-		Continuing Engineering Education, Refractory Manu-
Oct.	22	Fri.		facturing Short Course, Olin Hall.
Oct.	20	Wed.	11:15 a.m.	Agronomy, Dr. F.P. Achorn, TVA, Muscle Shoals, Ala., Production, Marketing and Use of Solid, Solution and Suspension Multinutrient Fertilizers I -- A-203 P&AS Building.
Oct.	21	Thurs.	11:15 a.m.	Agronomy - Dr. F.P. Achorn, TVA, Muscle Shoals, Ala., Production, Marketing and Use of Solid, Solution and Suspension Multinutrient Fertilizers II - A-203 P&AS Bldg.
Oct.	23	Sat.	1:30 p.m.	Football - Clemson vs. Auburn at Auburn, Ala.
Oct.	23	Sat.		Soccer - UNC at Chapel Hill.

CALENDAR OF CAMPUS EVENTS Continued

Oct.	25	Mon.	2:00 p.m.	Freshman Football - South Carolina at Clemson.
Oct.	25	Mon.		Ft. Hill Clemson Club Annual Business Meeting - election of officers.
Oct.	25	Mon.	7:00 p.m.	Foreign Film, <u>Viridiana</u> (Spanish), Daniel Hall Theatre - free.
Oct.	25	Mon.		Seminar, Continuing Engineering Education, Interactive Computing for High School Administrators, Riggs Hall.
Oct.	26	Tues.		Soccer - Duke.
Oct.	28-	Thurs.-		Architectural exhibit - "Still Life Today" - Lee
Nov.	14	Sun.		Hall Gallery.
Oct.	29	Fri.		Alumni National Council and Clemson Foundation - meet at Clemson House.
Oct.	29	Fri.		Tigerama - Stadium.
Oct.	30	Sat.	1:30 p.m.	Football - Wake Forest at Clemson (Homecoming).
Oct.	30	Sat.		Soccer - Western Carolina.
Oct.	30	Sat.		Cross Country Regional Meet.
Oct.	30	Sat.		CDA Concert.
Oct.	31	Sun.		Halloween.
Nov.	1	Mon.	2:00 p.m.	Freshman Football - Gordon Military at Barnesville, Ga.
Nov.	2	Tues.		Cross Country - State Meet at Furman.
Nov.	4	Thurs.	8:00 p.m.	Graduate wives monthly meeting - YMCA.
Nov.	4-	Thurs.-		Continuing Engineering Education, Seventh Air & Water
Nov.	5	Fri.		Pollution Control Seminar, Earle Hall.
Nov.	6	Sat.	1:30 p.m.	Football - Clemson vs. University of North Carolina at Chapel Hill, N.C.
Nov.	6	Sat.		Soccer - N.C. State at Raleigh.
Nov.	8	Mon.		Cross Country ACC Meet - at N.C. State.
Nov.	8	Mon.	7:00 p.m.	Foreign Film, <u>War of the Buttons</u> (French), Daniel Hall Theatre - free.
Nov.	10	Wed.		Soccer - Furman.
Nov.	11-	Thurs.-		Annual Dairy Science Conference, Clemson House.
Nov.	12	Fri.		

CALENDAR OF CAMPUS EVENTS Continued

Nov.	11	Thurs.	10:00 a.m.	Industrial Management & Textile Science Seminar Series, Stephen P. Parke, Corporate Director of Advertising, M. Lowenstein & Sons, New York, N.Y. - Sirrine Hall Aud.
Nov.	12	Fri.		Continuing Engineering Education, High School Teachers Workshop (Interactive Computing), Riggs Hall.
Nov.	13	Sat.	1:30 p.m.	Football - Maryland at Clemson (IPTAY Day).
Nov.	15	Mon.		Seminar-workshop, Continuing Engineering Education, Introduction to Experimental Stress Analysis, Lowry Hall.
Nov.	17	Wed.	8:00 p.m.	Clemson University Concert Series - The Preservation Hall Jazz Band, Littlejohn Coliseum.
Nov. Dec.	18- 12	Thurs.- Sun.		Architectural exhibit - "Early Architecture and Planning of Nantucket" - Lee Hall Gallery.
Nov.	20	Sat.	1:30 p.m.	Football - North Carolina State at Clemson (Parents' Day).
Nov.	24	Wed.		Thanksgiving holidays begin after last class.
Nov.	25	Thurs.		Thanksgiving Day.
Nov.	27	Sat.	1:30 p.m.	Football - Clemson vs. South Carolina at Columbia, S.C.
Nov.	29	Mon.		Classes resume.
Nov.	29	Mon.	8:00 p.m.	Clemson University Concert Series - Five By Six - Littlejohn Coliseum.
Nov.	29	Mon.	11:15 a.m.	Agronomy - Dr. E.A. Harre, TVA, Muscle Shoals, Ala., The World Fertilizer Market -- A-203 P&AS Bldg.
Dec.	2	Thurs.	8:00 p.m.	Graduate wives' monthly meeting - YMCA.
Dec.	4	Sat.		Basketball - freshmen & varsity - Clemson vs. Davidson at Charlotte, N.C.
Dec.	6	Mon.		Examinations begin.
Dec.	10	Fri.		Seminar, Continuing Engineering Education, Maintenance of State of the Art Electronics, Riggs Hall.
Dec.	11	Sat.		Basketball - varsity - Purdue at Clemson. freshmen vs. Anderson.
Dec.	15	Wed.		Architectural exhibit - "The Plastic Transformation #1" - Lee Hall Gallery.
Dec.	16	Thurs.		Mid-year graduation. Joint Army/Air Force Commissioning.
Dec.	18	Sat.		Basketball - Clemson vs. Indiana State at Terre Haute, Ind.

CALENDAR OF CAMPUS EVENTS Continued

Dec.	21	Tues.		Basketball - Clemson vs. Cincinnati at Cincinnati, Ohio.
Dec.	25	Sat.		Christmas.
Dec.	29-	Wed.-		Basketball - Poinsettia Classic at Greenville, S.C.
Dec.	30	Thurs.		
Jan.	1	Sat.		New Year's Day.
Jan.	3	Mon.		Orientation, new students.
Jan.	4	Tues.		Registration, all students.
Jan.	5	Wed.		Late registration.
Jan.	5	Wed.		Basketball - freshmen and varsity - Clemson vs. Georgia Tech at Atlanta, Ga.
Jan.	6	Thurs.		Classes begin, regular schedule.
Jan.	8	Sat.	8:00 p.m.	Basketball - varsity - Maryland at Clemson. freshmen vs. Gaston Jr. College.
Jan.	10	Mon.	7:00 p.m.	Foreign film, <u>The Cow and I</u> (French), Daniel Hall Theatre - free.
Jan.	11-	Tues.-		Annual Dairy Science Conference - Clemson House.
Jan.	12	Wed.		
Jan.	11	Tues.		Swimming - Augusta.
Jan.	12	Wed.		Last day for registration.
Jan.	12	Wed.	8:00 p.m.	Basketball - North Carolina at Clemson.
Jan.	12	Wed.		Seminar, Continuing Engineering Education - Digital Computing Process Control, Riggs Hall.
Jan.	14	Fri.		Architectural exhibit - "The South Carolina Arts Commission Collection" - Lee Hall Gallery.
Jan.	14	Fri.		Continuing Engineering Education, High School Teachers Workshop (Interactive Computing), Riggs Hall.
Jan.	15	Sat.		Basketball - Clemson vs. Duke at Durham, N.C.
Jan.	15	Sat.		Swimming - Appalachian State.
Jan.	17	Mon.		Basketball - Clemson vs. North Carolina State at Raleigh, North Carolina.

CALENDAR OF CAMPUS EVENTS Continued

Jan.	19	Wed.	8:00 p.m.	Basketball - varsity and freshmen - Furman at Clemson.
Jan.	20	Thurs.	8:00 p.m.	Clemson University Concert Series - Roger Wagner and Westminster Chorale - Littlejohn Coliseum.
Jan.	22	Sat.	8:00 p.m.	Basketball - varsity vs. Virginia Tech at Clemson; freshmen vs. N. Greenville Jr. College.
Jan.	22	Sat.		Swimming - at Augusta.
Jan.	22	Sat.		Indoor Track - at Philadelphia Track Classic.
Jan.	24	Mon.	7:00 p.m.	Foreign film, <u>Not on your Life</u> (Spanish), Daniel Hall Theatre--free.
Jan.	25	Tues.		Swimming - Emory.
Jan.	26	Wed.	8:00 p.m.	Clemson University Concert Series - The National Orchestra of Belgium - Littlejohn Coliseum.
Jan.	29	Sat.	8:00 p.m.	Basketball - varsity and freshmen - Georgia Tech at Clemson.
Jan.	29	Sat.		Indoor Track - at Auburn.
Jan.	31	Mon.	8:00 p.m.	Basketball - varsity vs. Virginia at Clemson; freshmen vs. Gainesville Jr. College.
Feb.	1	Tues.	8:00 p.m.	National Players will present Shakespeare's <u>Taming of the Shrew</u> in Tillman Hall.
Feb.	1	Tues.		Swimming - Davidson.
Feb.	2	Wed.		Basketball - Clemson vs. Virginia Tech at Blacksburg, Va.
Feb.	2	Wed.		Seminar, Continuing Engineering Education, Computer Aided Engineering Design, Riggs Hall.
Feb.	3	Thurs.	8:00 p.m.	Graduate wives' monthly meeting - YMCA.
Feb.	5	Sat.	8:00 p.m.	Basketball - freshmen and varsity - South Carolina at Clemson.
Feb.	5	Sat.		Swimming - Ga. Tech.
Feb.	5	Sat.		VMI Indoor track relays, Lexington, Va.
Feb.	7-	Mon.-		Architectural exhibit - "Montana Ghost Towns" -
Feb.	24	Thurs.		Lee Hall Gallery.
Feb.	7	Mon.	7:00 p.m.	Foreign film, <u>The Good Soldier Schweik</u> (German), Daniel Hall Theatre - free.

CALENDAR OF CAMPUS EVENTS Continued

Feb.	9-	Wed.-		
Feb.	11	Fri.		Continuing Engineering Education, Second Annual S.C. State Highway Department Conference, Lowry Hall.
Feb.	10	Thurs.		Swimming - at USC.
Feb.	11	Fri.		Basketball - North-South Doubleheader at Charlotte, N.C.
Feb.	12	Sat.		Basketball - North-South Doubleheader at Charlotte, N.C.
Feb.	14	Mon.		Basketball - Freshmen at Furman.
Feb.	14	Mon.	7:00 p.m.	Foreign film, <u>Ballad of a Soldier</u> (Russian), Daniel Hall Theatre--free.
Feb.	16	Wed.	8:00 p.m.	Clemson University Concert Series - Jack and Sally Jenkins in "I Do, I Do!" -- Littlejohn Coliseum.
Feb.	16	Wed.		Basketball - Clemson vs. Wake Forest at Winston-Salem, N.C.
Feb.	19	Sat.		Basketball - varsity vs. Maryland at College Park, Md.; freshmen vs. UNC at Charlotte, N.C.
Feb.	19	Sat.		Swimming - UNC.
Feb.	20	Sun.		Swimming - N.C. State.
Feb.	21	Mon.		Basketball - Clemson vs. Virginia at Charlottesville, Va.
Feb.	25	Fri.		Architectural exhibit - "Photographics" - Lee Hall Gallery.
Feb.	25	Fri.		Swimming - at Wake Forest.
Feb.	26	Sat.	8:00 p.m.	Basketball - Wake Forest at Clemson; freshmen vs. Fort Jackson.
Feb.	26	Sat.		Swimming - at Duke.
Feb.	26	Sat.		Indoor Track ACC Meet at Chapel Hill.
Feb.	28-	Mon.-		"The College of Agricultural Sciences Improvement of Instruction Week."
March	3	Fri.		
Feb.	28	Mon.	7:00 p.m.	Foreign film, <u>A Basket of Crabs</u> (French), Daniel Hall Theatre - free.
March				Military Banquet & Ball; Annual Army ROTC Inspection: dates indefinite.
March	1	Wed.	8:00 p.m.	Basketball - Duke at Clemson; freshmen vs. U.N.C. at Charlotte.

CALENDAR OF CAMPUS EVENTS Continued

March	2- Thurs.-		ACC Swimming Tournament.
March	4 Sat.		
March	2 Thurs.	8:00 p.m.	Graduate wives' monthly meeting - YMCA.
March	3 Fri.		Ft. Hill Clemson Club "Clemson Week Around the World" Banquet - Clemson House.
March	4 Sat.		Basketball - varsity and freshmen - Clemson vs. South Carolina at Columbia.
March	4 Sat.		Baseball - Louisville at Clemson.
March	4 Sat.		Tennessee Indoor Track Relays at Knoxville.
March	5 Sun.		Baseball - Louisville at Clemson.
March	6 Mon.		Baseball - West Virginia at Clemson.
March	6 Mon.	7:00 p.m.	Foreign film, <u>The Roots</u> (Spanish), Daniel Hall Theatre - free.
March	7 Tues.		Baseball - West Virginia at Clemson.
March	8 Wed.		Baseball - W. Virginia at Clemson.
March	8 Wed.		Outdoor Track - at Furman.
March	9- Thurs.-		Basketball - ACC Tournament at Greensboro, N.C.
March	11 Sat.		
March	10 Fri.		Spring holidays begin after last class.
March	10 Fri.		Baseball - at Florida State University.
March	10- Fri.-		Indoor NCAA Track Meet.
March	11 Sat.		
March	11 Sat.		Baseball - at Florida State University.
March	12 Sun.		Baseball - at Florida State University.
March	13 Mon.		Baseball - at Kansas City Royals Academy.
March	14 Tues.		Baseball - at Kansas City Royals Academy.
March	15 Wed.		Baseball - at Kansas City Royals Academy.
March	16 Thurs.		Baseball - at Kansas City Royals Academy.
March	17 Fri.		St. Patrick's Day.
March	17 Fri.		Baseball - at Georgia Southern.

CALENDAR OF CAMPUS EVENTS Continued

March	18	Sat.	Baseball - At Georgia Southern.
March	18	Sat.	Outdoor Track - UNC at Chapel Hill.
March	20	Mon.	Classes resume.
March	20	Mon.	Baseball - Ohio University at Clemson.
March	20	Mon.	7:00 p.m. Foreign film, <u>The Girl with the Golden Eyes</u> (French), Daniel Hall Theatre - free.
March	21	Tues.	Clemson Area Continuing Education Classes.
March	21	Tues.	Baseball - Ohio University at Clemson University.
March	22	Wed.	Outdoor Track - East Tennessee State University.
March	22	Wed.	Continuing Engineering Education, Operation Research, Riggs Hall - Seminar.
March	24-	Fri.-	Architectural exhibit - "Recent Work by Sculptor John
April	23	Sun.	Acorn" - Lee Hall Gallery.
March	24-	Fri.-	Food Industries Auditorium--"The Egg and Art Exhibition."
March	26	Sun.	
March	24-	Fri.-	Outdoor Track - Florida Relays.
March	25	Sat.	
March	24	Fri.	Continuing Engineering Education, High School Teachers Workshop (Interactive Computing), Riggs Hall.
March	25	Sat.	Baseball - Duke at Clemson.
March	26	Sun.	Palm Sunday.
March	26	Sun.	Baseball - Duke at Clemson.
March	27	Mon.	Baseball - Duke at Clemson.
March	28	Tues.	Clemson Area Continuing Education Classes.
March	29	Wed.	Baseball - University of S.C. at Clemson.
March	29	Wed.	Seminar, Continuing Engineering Education, Machines and Control, Riggs Hall.
March	31	Fri.	Baseball - at University of North Carolina.
April	1	Sat.	Baseball - at University of North Carolina.
April	1	Sat.	Outdoor Track -- State-Record Relays.
April	2	Sun.	Easter Sunday.

CALENDAR OF CAMPUS EVENTS Continued

April	2	Sun.		Baseball - at N.C. State University.
April	4	Tues.		Clemson Area Continuing Education Classes.
April	5	Wed.		Honors and Awards Day - classes suspended at 12 noon.
April	5	Wed.		Baseball - at University of South Carolina.
April	6	Thurs.	8:00 p.m.	Graduate wives monthly meeting - YMCA.
April	7	Fri.		Baseball - Wake Forest at Clemson.
April	8	Sat.		Baseball - Wake Forest at Clemson.
April	8	Sat.		Outdoor Track - Duke.
April	9	Sun.		Baseball - Georgia Tech at Clemson.
April	10- April 15	Mon.- Sat.		Clemson Week Around the World.
April	10	Mon.	8:00 p.m.	Clemson University Concert Series - Gershon Kingley's First Moog Quartet - Littlejohn Coliseum.
April	11	Tues.		Clemson Area Continuing Education Classes.
April	11	Tues.		Honors and Awards Day - military.
April	11	Tues.		Baseball - at Georgia.
April	12	Wed.		Outdoor Track - USC.
April	12	Wed.		Seminar, Continuing Engineering Education, The Mini Computer, Riggs Hall.
April	14	Fri.		Baseball - N.C. State at Clemson.
April	15	Sat.		Baseball - N.C. State at Clemson.
April	15	Sat.		Outdoor Track - at Georgia.
April	16	Sun.		Baseball - University of N.C. at Clemson.
April April	17- 19	Mon.- Wed.		Symposium - Workshop, Continuing Engineering Education, Material & Design Considerations for Attachment of Prostheses to the Musculo-Skeletal System, Rhodes Engineering Research Center.
April	18	Tues.		Clemson Area Continuing Education Classes.
April	18	Tues.		Baseball - at Georgia.
April	21	Fri.		Baseball - USC at Sumter.
April April	21- 22	Fri.- Sat.		Outdoor Track - Pennsylvania Relays.

CALENDAR OF CAMPUS EVENTS Continued

April	22	Sat.	Baseball - Georgia Tech at Clemson.
April	24	Mon.	Examinations begin.
April	25	Tues.	Clemson Area Continuing Education Classes.
April	30	Sun.	Daylight Savings Time Begins.
May	2	Tues.	Baseball - Georgia at Clemson.
May	3	Wed.	Baseball - at Georgia Tech.
May	5	Fri.	Baseball - at Wake Forest.
May	5	Fri.	Commencement -- Joint Army & Air Force Commissioning ceremonies.
May	5- Fri. -		
May	6	Sat.	Outdoor Track - State Meet at Columbia.
May	6	Sat.	Baseball - at Virginia.
May	7	Sun.	Baseball - at Virginia.
May	8	Mon.	Baseball - at Virginia.
May	9- Tues.-		
May	12	Fri.	Continuing Engineering Education, Water and Wastewater Treatment Plant Operators School, Lowry Hall.
May	10	Wed. ,	Baseball - at Maryland.
May	11	Thurs.	Baseball - at Maryland.
May	12	Fri.	Baseball - at Maryland.
May	12- Fri.-		
May	13	Sat.	Outdoor Track Meet at Charlottesville, Va.
May	14	Sun.	Mother's Day.
May	15	Mon.	Registration - first session summer school, all students.
May	16	Tues.	Classes begin.
May	26	Fri.	Outdoor Track - Meet of Champions at Houston.
May	28	Sun.	Trinity Sunday.
May	29	Mon.	Memorial Day.

CALENDAR OF CAMPUS EVENTS Continued

June	5- Mon.-	Tiger Basketball Camp.
July	1 Sat.	
June	5- Mon.-	FFA Convention - campus.
June	8 Thurs.	
June	9 Fri.	Alumni National Council and Clemson Foundation - Meet at Clemson House.
June	9- Fri.-	Alumni Reunion Weekend.
June	11 Sun.	
June	9- Fri.-	Outdoor Track USTFF.
June	10 Sat.	
June	10 Sat.	Alumni Class Meetings; General Assembly; Alumni Banquet.
June	15- Thurs.-	Outdoor Track - NCAA Meet at Eugene, Oregon.
June	17 Sat.	
June	21 Wed.	Examinations.
June	22 Thurs.	Examinations.
June	26 Mon.	Orientation, new students.
June	27 Tues.	Registration - second session summer school, all students.
June	28 Wed.	Classes begin.
July	1 Sat.	No classes.
July	8 Sat.	No classes.
July	15 Sat.	No classes.
July	18- Tues.-	State 4-H Convention - campus.
July	21 Fri.	
July	22 Sat.	No classes.
July	29 Sat.	Classes meet today.
Aug.	2 Wed.	Examinations.
Aug.	3 Thurs.	Examinations.
Aug.	5 Fri.	Graduation -- Army ROTC Commissioning.

PROCEDURES FOR SUBMITTING NEWSLETTER MATERIAL

All Calendar items of campus events (speakers, films, meetings, seminars, sporting events, etc.) should be submitted by written memorandum directly to the Office of Public Relations, Trustee House. Information and news items from the Office of the President, Vice President for Business and Finance, Vice President for Executive Affairs, Vice President for Student Affairs and the Vice President for Development should be submitted by written memorandum to the Office of Public Relations, Trustee House. Information and news items from all areas under the Vice President for Academic Affairs should be submitted by written memorandum to Dr. Claud B. Green, Room 28, Tillman Hall.

The following deadlines prevail: Items to appear in the Newsletter published the 1st of each month must be submitted by the 20th of the previous month; items to appear in the Newsletter published the 15th of each month must be submitted by the 5th of each month.

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NEWSLETTER

INFORMATION FOR THE STAFF OF CLEMSON UNIVERSITY

Vol. 11 No. 2

September 1, 1971

INSTITUTIONAL SELF-STUDY REPORT COMPLETED

Dr. Cecil Godley, Chairman, and the Steering Committee for the Institutional Self-Study have announced the completion of the reports which will be presented to the Visiting Committee from the Southern Association of Colleges and Schools. This Committee will be on the Clemson campus from October 31 through November 3, 1971.

In addition to one complete set which has been placed in the Robert Muldrow Cooper Library, other complete sets of the reports prepared by the University Committees are in the offices of the individuals named below. All members of the Clemson University faculty and staff are urged to read as widely in these reports as they can between now and the time the Visiting Committee arrives on the campus. The reports are considered confidential until after the Visiting Committee has come to the campus and departed. You are asked to respect this confidentiality by not discussing the contents of these reports with anyone who is not authorized to read them.

The reports are available in the offices of the following: Vice President Walter T. Cox, Vice President Stanley G. Nicholas, Vice President Melford A. Wilson, Dean W. H. Wiley, Dean H. E. McClure, Dean H. F. Landrith, Dean L. G. Rich, Dean W. H. D. McGregor, Dean W. D. Trevillian, Dean H. M. Cox, Dean Geraldine Labecki and Dean H. E. Vogel.

ADDITIONAL INFORMATION ABOUT TAX-SHELTERED ANNUITIES

Although the opportunity for former employees to begin (or make changes in) an authorized tax-deferred annuity program for 1971-72 ended on August 31, new employees are reminded that arrangements for such programs are accepted by Clemson University if they are completed within the first 30 days of each individual's employment.

Details are included in a memorandum available from the Personnel Office, Tillman Hall. The University will honor a request for salary diversion to any insurance company licensed by the South Carolina Insurance Commission, or any investment firm registered with the State authority which regulates securities. Any employee desiring to utilize the services of TIAA-CREF must complete all arrangements through their office in New York City.

PEDESTRIANS HAVE RIGHT OF WAY

The recent addition of Paragraph 4-7 to the Clemson University Traffic Code clearly states: "Pedestrians in Marked Corsswalks Have Right Of Way." This regulation is included in the Student Handbook and on both the employee and student parking maps.

COMMUNICATIONS CENTER

W.E. "Bill" Osteen, a staff photographer for the past five years in the Communications Center, has been promoted to producer-director of the center's television section. He will coordinate and direct the production of television programs produced by the Communications Center for use and commercial television and the S. C. Educational Television Network.

INTERIM DIRECTOR OF BANDS NAMED

James K. Copenhaver, assistant director of bands at Morehead State University in Kentucky for the past year, has been named interim director of the Tiger Band for 1971-72. Copenhaver will serve while the regular director, Bruce F. Cook, pursues doctoral studies for a year at the University of Texas.

A 28-year-old Virginia native, Copenhaver directed the renowned Holmes High School Band (Covington, Ky.) for six years. Under his leadership, the band consistently earned superior rating in concert and marching festivals throughout the Midwest.

Copenhaver completed requirements for the master of music education degree at Morehead State University.

FORT HILL CLEMSON CLUB SUMMER SHRIMP & SIP

Tickets are now on sale at the Alumni Office in the Trustee House and at Fike Field House for the Fort Hill Clemson Club's annual "Shrimp and Sip" lakeside party. The informal "mens night out" program begins at 6:30 p.m., September 8 (alternate date, in case of rain, September 9) at Wilson's Landing. Tickets are \$3.50 each and must be purchased by September 6. NO TICKETS WILL BE SOLD AFTER THAT DATE. This year's occasion precedes the kickoff of the 1971 football season by just three days, and Coach Hootie Ingram will be on hand to give an up-to-the minute report on the Tigers as they view their opener with the Kentucky Wildcats.

ANNUAL REPORT OF THE FACULTY SENATE PRESIDENT TO THE GENERAL FACULTY,
MAY 6, 1971

At this time each year the retiring Faculty Senate President is required to present an annual report of the activities and actions of the Faculty Senate. The report for 1970-71 will be in several parts: General Actions; Activities and Actions Related to Admissions and Scholarship; Policy; Research; and Welfare; and Ad Hoc Committee Activities. Most of the report will consist of actions and the status of these actions. Lengthy actions will be presented in summary form.

General Actions.

1. Resolved:

It is recommended by the Faculty Senate that the present status of the Curriculum Committee, Graduate Council, and other such committees be retained until a thorough study can be made of these committees by the Faculty Senate. This study will be made to determine the purposes, roles, functions and general structure of the committees and to make recommendations concerning their future. The Faculty Senate requests the participation of the Administration in this study.

Status: This action resulted in the formation of an ad hoc committee of the Senate in which the Administration did participate. The findings of this ad hoc committee will be discussed later in this report.

2. Resolved:

The Faculty Senate endorses and supports the "Policy Concerning Conduct of Students and Employees of Clemson University" as approved by the Board of Trustees of Clemson University, May 28, 1965. It is further resolved that the above stated policy should be disseminated to all students, faculty, and employees.

Status: The Administration responded to this action in a positive manner. In particular, these policies were distributed to all incoming freshmen students and these policies were published in the September 1, 1970 Clemson Newsletter.

3. Resolved:

The Faculty Senate requests the Administration to reconsider the allocation of the entire \$6-million provided for construction of a University Union Building.

Status: The Administration has reviewed all aspects of the University Union project during the past year. This has brought about a new concept of the Union Building. The final outcome is still not known, since no contracts have been let.

ANNUAL REPORT OF THE FACULTY SENATE PRESIDENT (Continued)

4. Resolved:
The Faculty Senate resolves that the minutes of the Graduate Council should be published in the Newsletter.

Status: The minutes of the Graduate Council now appear in the Newsletter.

5. Resolved:
The Faculty Senate supports the President of Clemson University in his decision that the Atlantic Coast Conference should eliminate the requirement that a prospective student-athlete must score a minimum of 800 on the SAT as a prerequisite for eligibility to receive a grant-in-aid and/or participate in intercollegiate athletics.

Status: This action required no response from the Administration, but the Administration was appreciative of this support.

6. Resolved:
The President of the Faculty Senate is empowered and directed to express the appreciation of the Senate to the Clemson Alumni Association for the Alumni Professorships, a stimulus to improve teaching at Clemson University.

Status: This directive was complied with. The action required no response from the Administration.

7. Resolved:
The University Library Committee, as the faculty's representative, should be consulted whenever the allocation of library space is being considered.

Status: This action required no response from the Administration.

8. Resolved:
The Faculty Senate recommends to the General Faculty two amendments to the Constitution and By-Laws of the Faculty and Faculty Senate.

Amendment I. (To be added to the By-Laws immediately after the first sentence of Article II, Section 1.) "For purposes of allocation of Senate seats and all other provisions of this Article, the professional librarians will be considered as faculty representing a school."

Amendment II. (To be added to the By-Laws in Article II, Section 1 by insertion between paragraph six (6) and paragraph seven (7). "Colleges or schools with only one regular Senate member shall elect an alternate on a yearly basis. The alternate shall have the status of a full member at any Senate meeting attended in the stead of the regular member."

ANNUAL REPORT OF THE FACULTY SENATE PRESIDENT (Continued)

Status: These amendments do not require Administrative approval. (They will be voted on later at this meeting.)

9. Resolved:

In view of the short publishing life of many books and periodicals and the necessity of having current material for adequate teaching and research, the Faculty Senate expresses its deep concern over the complete freeze on funds for new book and periodical purchases for the Library as part of the University's general cut in the acquisition of new equipment. The Senate, therefore, recommends that the Administration authorizes the release of part of these funds for urgently needed materials on a priority scale to be determined by the Director of the Library.

Status: The Administration is presently making every effort to provide sufficient funding of the Library under the constraint of the 6% budget cut imposed by the State Budget and Control Board.

Activities and Actions Related to Admissions and Scholarship

1. Follow-up Activity:

In 1969-70 the Faculty Senate recommended deletion of the student policy which allows re-examination for students who fail to meet graduation requirements by six or fewer points. At the request of the Administration, the Admissions and Scholarship Committee polled the Faculty to determine if this was the consensus of the entire Faculty. It was.

Status: The Administration has decided not to delete this academic policy at this time.

2. Resolved:

The Faculty Senate declares the current system of the "Forgivable F" for first semester freshmen totally unacceptable and requests the Administration to implement the Faculty Senate's original resolution beginning with the class which enters in the summer of 1971.

Status: The Administration has decided not to alter the present academic policy at this time.

3. Summary of a resolution:

The Faculty Senate recommended deletion of the scholastic regulation on pages 120-121 of the Clemson University Announcements regarding re-examination for degree candidates who fail a course in their last semester.

Status: The Administration has agreed to delete this scholastic regulation.

ANNUAL REPORT OF THE FACULTY SENATE PRESIDENT (Continued)

4. Resolved:

Be it resolved that the Faculty Senate, which has no intent of limiting the prerogatives of any faculty member or department, encourages all faculty members and/or departments not to schedule examination or quizzes at other than normally scheduled class times.

Status: The Administration agrees with the intent and purpose of this resolution and encourages adherence.

5. Resolved:

The Faculty Senate requests the Office of Admissions and Registration to publish final examination schedules as early as is feasible.

Status: Final examination schedules were published as early as feasible this semester and much earlier than last semester.

6. Resolved:

The period in which a student may drop a course without record of the grade shall be reduced from four (4) to two (2) weeks: and the period in which a student may drop a course with a grade of Withdrew Passing shall be no more than one week after mid-term grades are due in the Registrar's Office.

Status: There is no Administrative response available at this time.

Activities and Actions Related to Policy.

1. Resolved:

The awarding of honorary degrees should be limited to occasions of special significance to the University when awarding would clearly express the ideals of the University or recognize exceptional attainment.

Status: At the February 3, 1971 meeting of the Board of Trustees, a revised policy for honorary degrees was adopted. This new policy, which reflects this recommendation, appeared in the February 15, 1971 issue of the Newsletter.

2. Activity and Resolution:

At the request of a university self-study committee, the Faculty Senate Policy Committee drafted a working statement of University purpose from the Faculty viewpoint. After amendment, this six paragraph document was adopted. It appeared in the Minutes of the Senate of October 13, 1971.

Status: The appropriate self-study committee has used it in its deliberations.

ANNUAL REPORT OF THE FACULTY SENATE PRESIDENT (Continued)Activities and Actions Related to Research.

1. Resolved:

The Faculty Senate recommends that information and data be assembled to determine the needs of various research interests. It is further recommended that future building and development plans incorporate items, services, equipment and facilities which are essential to research progress.

Status: The Administration requested further specific information. In response, the Research Committee surveyed the Research Faculty and, in particular, solicited opinions on the need for a centralized physical research facility. The results of this survey appeared in the December 15, 1970 Newsletter.

2. Resolved:

The Faculty Senate recommends that due notice be taken of publication charges and their growing importance in research budgets, and that appropriate budgetary plans be made for them by the University Administration.

Status: The Administration pledged its continued support of research, as well as other University activities, with a special note of the rising cost of research publications.

3. Resolved:

The Faculty Senate recommends careful consideration be made before the Clemson bottom land or any other area is removed from academic or research use. In order to implement this recommendation it is requested that faculty representatives of the departments affected participate in any decision pertaining to contemplated changes in use of University land and facilities.

Status: The Administration assured the Senate that the allocation of the Clemson "bottom lands" was part of the overall master plan for development of the University. Furthermore, whenever land or other facilities concerned with academic matters are to be reallocated, the faculty would be consulted through the normal channels.

Activities and Actions Related to Welfare.

1. Resolved:

The Faculty Senate recommends that the University Retirement Policy of October 18, 1965 be amended to include the same rights and privileges for those employees who may elect to retire before reaching mandatory retirement age as for those who retire at mandatory age.

Status: The Senate was unsuccessful in its attempts to remove the discriminatory aspects of the policy.

ANNUAL REPORT OF THE FACULTY SENATE PRESIDENT (Continued)

2. Resolved:

The Senate recommends that Section 1, Article 2, paragraph 1 of the 1970-71 Student Regulations not be deleted and that the student bill requesting deletion (B-71-01) be returned to the Student Senate for consideration of a possible revision of the above mentioned "dress code."

Status: At present, the above mentioned student regulation still exists.

3. Summary of a Resolution:

The Faculty Senate has recommended the establishment of a Faculty-Student Relations Committee, consisting of students, faculty, and administrators, which would hear selected grievances by students against faculty members or other University employees. This committee is being recommended for a trial period of two years.

Status: The Administration-Faculty-Student Council has agreed with the recommendation in principle. The proposal is still under study by the Administration.

4. Resolved:

That the Faculty Senate support the proposed amendment to section 61-114.1 of the S. C. Retirement Law by deleting the words "thirty-five years of creditable service, or after the attainment age sixty with ...". That the Administration render its support by contacting appropriate persons in the S. C. State Legislature and presenting to them reasons for the amendment.

Status: This resolution was in support of Administrative attempts to improve certain aspects of the retirement policy. It is still under study.

Ad Hoc Committee Activities.

Ad Hoc Committee on the Student Union

This committee studied the union building with respect to the plans that existed at that time. The main objective was to determine what faculty facilities, if any, were desired by the faculty in that building. The committee solicited suggestions from the faculty via a letter sent to each faculty member. Approximately seventeen percent of the faculty members replied in writing. There appeared to be little interest in having faculty facilities in the union building, but the information obtained through the survey was turned over to the Administration. The committee was then dissolved.

Ad Hoc Committee A on the Revision of the Faculty Manual

This committee met numerous times to recommend much needed revisions of the faculty manual. The Administration was invited and did participate in the deliberations of the committee. The recommendations of the committee

ANNUAL REPORT OF THE FACULTY SENATE PRESIDENT (Continued)

were presented to the Faculty Senate at two special meetings of the Senate. With minor changes these recommendations, which consist of thirty-eight pages, were overwhelmingly approved by the Senate. The Administration has formed a special committee of administrators to study these recommendations. A member of the faculty is serving on this committee in an ex officio capacity. Ad Hoc Committee A was dissolved.

Ad Hoc Committee B on the Standing Committees of the University

This committee was created to study the formal organization of the graduate faculty and the standing committees of the university. It was determined that there was no need to formally organize the graduate faculty. With respect to the standing councils and committees of the university, each such body was thoroughly studied. One of the major recommendations is the creation of policy making councils for the Dean of Undergraduate Studies and the Dean of Extension to parallel the structure of the Graduate Council. These recommendations, which total approximately ten pages, are being studied by the committee of administrators reviewing the suggested revision of the Faculty Manual. Two additional recommendations also resulted from the activities of this committee: (1) that a development council with faculty representatives be instituted; and (2) that the 1971-1972 Faculty Senate study the need for a master planning committee. Ad Hoc Committee B has now been dissolved.

Ad Hoc Committee C on Graduation Exercises

The Senate created this committee to study and make recommendations concerning the graduation exercises. The committee studied many recent attempts to reform the graduation exercises. There were no formally recommended changes from this committee, primarily because the entire graduation exercise will have to be reexamined in a few years when the number of graduates prohibit the present format. However, the Senate did recommend publication of the present policies on graduation. These appeared in the Clemson Newsletter. This ad hoc committee was also dissolved.

In closing, I, in behalf of the Faculty, would like to express appreciation to the Administration for the open door policy that I found in representing the Faculty. I found that we were always able to honestly discuss our problems of mutual interest.

We are all aware of the tremendous, but not insurmountable, problems facing higher education in this nation. The survival of many colleges and universities will be determined by the quality of the students that they produce.

ANNUAL REPORT OF THE FACULTY SENATE PRESIDENT (Continued)

On numerous occasions, the Faculty has been assured by President Edwards that Clemson University is not in the student numbers game. With this strong Administrative support, the Faculty of Clemson University has an opportunity and an obligation to develop and maintain quality academic programs. It is the responsibility and duty of the Faculty to determine and maintain these academic standards.

B. J. Prochaska, President, 1970-71 Faculty Senate

GRADUATE COUNCIL MINUTES, JULY 28, 1971

The Graduate Council met in Tillman Hall, Room 21, on July 28, 1971, at 3:00 p.m. Members of the Council present for this meeting were: Dean A. E. Schwartz, Dr. H. W. Graben, Dr. J. S. Wolf, Mr. Larry Vick, Dr. C. R. Smith, Dr. N. D. Camper and Dr. C. R. Freeze. Absent were Prof. G. C. Means, Dr. C. W. Bolen, Dr. R. M. Allen, and Mrs. Gayle Sawyer.

A motion was made that the minutes of the Graduate Council meeting of May be approved. The Council approved the minutes without dissent.

Dr. Graben moved, seconded by Dr. Wolf, to approve the request for credit transfer by Mr. Robert C. Quesenbury. The motion was adopted by the Council without dissent.

Dr. Smith moved, seconded by Dr. Graben, that the request regarding Special Institute Courses by Dr. M. A. King be granted. The three courses (Education 732, 735, 736) were approved unanimously by the Council as equivalent to "800 level" only for the students listed in a memorandum to Dean Schwartz from Dr. M. A. King, dated July 6, 1971.

The list of candidates for August 1971 graduation was approved.

Dean Schwartz commented on a letter from Dr. J. A. Morris, Commissioner, South Carolina Commission on Higher Education, dated July 2, 1971, regarding limited options in the Ph.D. program in Systems Engineering.

At 4:15 p.m., Dr. Graben moved that the meeting be adjourned. The Council approved the motion unanimously.

FACULTY RESEARCH COMMITTEE GRANT APPLICATIONS

Proposals for Faculty Research Committee grants should be in the Office of University Research, 17 Tillman Hall, not later than November 1, 1971. Application forms may be secured in the Office of University Research. Only proposals using the Faculty Research Committee application form will be considered by the Committee.

The Committee makes awards to new faculty members initiating research, to faculty members initiating research in a new area, and in areas where other sources of support are inadequate or nonexistent.

AGRICULTURAL CHEMICAL SERVICES

N. R. Page (Hd) has been appointed an Associate Editor, Soils of the Agronomy Journal for the period 1972-1974.

AGRICULTURAL ENGINEERING

J. T. Ligon (Prof) and B. K. Webb (Assoc Prof) attended the 1971 annual meeting of the American Society of Agricultural Engineers in Pullman, Wash. June 27-30. Dr. Ligon presented the following papers: "Water Tables and Soil Moisture Probabilities with Tile Drainage" by T. C. Young and J. T. Ligon; "Distribution of Moisture in the Unsaturated Profile on a Piedmont Watershed" by J. T. Ligon and T. V. Wilson; and "The Use of CSMP in Agricultural Engineering Problems" authored by J. R. Lambert. Dr. Webb presented the following papers: "Mechanical Harvesting of Okra" by M. K. Richardson; "A Comprehensive Technique for Evaluating the Performance of Soil Incorporated Herbicides" by T. H. Garner (Assoc Prof), B. K. Webb, B. J. Gossett (Assoc Prof) and C. E. Rieck (Asst Prof).

T. H. Garner has returned from a year's leave-of-absence with the John Deere Planter Works, Moline, Ill., under the ASEE-Ford Foundation Program of Residencies in Engineering Practice.

COMPUTER CENTER

A Users' Guide to the Clemson University Computer Center has been issued to those on the Computer Center mailing list. Copies of this new publication are available at the Center. The Computer Center also publishes a monthly newsletter, Compusion, to disseminate current information on operating procedures and other items of interest to users. University staff members will be added to the mailing list on request.

ELECTRICAL AND COMPUTER ENGINEERING

Irwin S. Tolins (Assoc Prof) attended the 1971 eight-week Summer Institute in Numerical Methods of Digital Computing, Programming, Languages and Simulation Techniques at the University of Missouri - Rolla, from June 7 - July 30. The program was sponsored by the National Science Foundation. He also attended a week of lectures on Optimization theory at Computer Data Corp., Huntsville, Ala., given by Professor Miele of Rice University in May.

ENVIRONMENTAL SYSTEMS ENGINEERING

Who Is Responsible for Clean Water? This was the theme of an environmental control workshop for twenty-five municipal and county officials held on August 11 in Conway. The workshop was sponsored by the Environmental Systems Engineering Dept. as part of a grant under Title I of the Higher Education Act of 1965. J. M. Glennon, Jr. (Sanitary Engineer) and J. H. Austin (Prof) assisted with the workshop.

INTERDISCIPLINARY STUDIES

H. R. Bungay (Prof) and D. M. Harold have a paper "Simulation of Oxygen Transfer in Microbial Slimes" in the June 1971 issue of Biotechnology and Bioengineering.

S. F. Hulbert (Assoc Dean), C. D. Talbert (Grad Stu), J. J. Klawitter (Asst Prof) published a chapter entitled "Investigation of the Potential of Ceramics for Surgical Applications" in the book entitled Biomaterials - Bioengineering Applied to Materials for Hard and Soft Tissue Replacement, pp. 3-77. Edited by A. L. Bement, Jr., University of Washington Press (1971).

S. F. Hulbert presented a paper entitled "Selection of Materials for the Construction of Artificial Organs" at the 1971 Gordon Research Conference on Crystal Growth, Meriden, N. H., July 29. Dr. Hulbert also presented a paper entitled "Calcification in Porous Bone Implants" at the 1971 Gordon Conference on Science and Technology of Biomaterials, Plymouth, N. H., August 5.

Clemson University received a \$16,140 grant from the National Science Foundation for a Senior Foreign Scientist in the field of Bioengineering. The position will be filled by Dr. Hermann Metzger, Director of the Physiologisches Institute, Johannes Gutenberg University.

FOOD SCIENCE

A paper entitled "Measurement of Post-harvest Ripening Rate of Freestone Peaches" by A. L. Shewfelt (Univ of Ga), V. A. Paynter and J. J. Jen (Asst Prof) has been published as Department of Food Science Research Series No. 18.

Lynn Crook (Asst Prof) and W. P. Williams, Jr. (Prof and Hd) had a paper entitled "Moisture and Oil Concentrations in Feedstuffs as Determined by Different Methods," published in The Journal of the Association of Official Analytical Chemists (1971), pp. 756-760.

PHYSICS

L. R. Kirkland (Grad Stu) and R. L. Chaplin (Assoc Prof) published a paper in the July issue of Journal of Applied Physics entitled "Electrical Size Effect of Aluminum Single Crystals."

RECREATION AND PARK ADMINISTRATION

L. W. Gahan (Asst Prof) directed a one day seminar for park and/or recreation commissioners from throughout the state in Columbia, June 8. Herbert Brantley (Assoc Dean and Hd) was one of the featured speakers at the seminar. The seminar was funded under Title I of the Higher Education Act of 1965.

L. W. Gahan and D. J. Edgar (Grad Stu, Texas A & M University) conducted a workshop for summer playground staff employed by the CREATE Recreation Program in Laurens and serving Laurens County, May 29.

SOCIAL SCIENCES

E. M. Lander, Jr. (Alumni Prof) reviewed Steven A. Channing's Crisis of Fear: Secession in South Carolina in Journal of Southern History, XXXVII (May 1971), 297-99, and reviewed William W. Rogers' The One-Gallused Rebellion: Agrarianism in Alabama, 1965-1896 in Journal of Negro History, LVI (January 1971), 55-57.

ZOOLOGY

A. S. Tombes (Assoc Prof) presented a talk at the International Congress of Physiology in Munich, Germany, July 26. The title of this paper is "Neuroendocrine Control of the Arthropod spermathecae."

ADDITIONAL NEW FACULTY AND STAFF 1971-72

Albrecht, John E., Station Extension Specialist (Animal Science); B.S., Delaware Valley College; M.S., Ph.D., N.C. State University; Married; 107 Haskell Ave., Florence

Fowler, William R., Jr., Assistant Professor of Psychology; B.A., Emory University; Ph.D., Duke University; Married, 3 children

Russell, Donald R., Instructor in Mathematics; B.S., M.S., Clemson University; Married

Skinner, Cheryl J., Part-time Instructor in Industrial Management; B.S., M.B.A., University of California; Married, 15-A Keys Manor, Pine Street, Clemson

CALENDAR OF CAMPUS EVENTS

Sept. 2	Thurs.	8:00 p.m.	Graduate wives' monthly meeting - YMCA
Sept. 2	Thurs.	3:45 p.m.	Women's Club Reception for Newcomers, Clemson House
Sept. 6	Mon.	7:00 p.m.	Foreign film, <u>Miguelin</u> (Spanish), Daniel Hall Theatre - free
Sept. 8	Wed.	6:30 p.m.	Fort Hill Clemson Club - Summer Shrimp & Sip, Wilson's Landing
Sept. 8	Wed.	8:00 p.m.	Clemson University Newcomers Club - Clemson House
Sept. 11	Sat.	1:30 p.m.	Varsity Football - Kentucky at Clemson (Band Day)
Sept. 11	Sat.		CDA Concert
Sept. 13	Mon.	7:00 p.m.	Foreign Film, <u>Les liaisons dangereuses</u> (French) Daniel Hall Theatre - free
Sept. 15	Wed.	10:00 a.m.	Industrial Management and Textile Science Seminar Series - Mr. Raymond Shockley, Vice President and Executive Director of S.C. Textile Manufacturers Association, Columbia, S.C. - Sirrine Hall Aud.
Sept. 15	Wed.	3:30 p.m.	Food Science Seminar, W.C. Horton, Jr., State Environmental Program, Columbia, S.C., will speak on "Food Protection Programs in South Carolina." P&AS Bldg. Room F-150

PROCEDURES FOR SUBMITTING NEWSLETTER MATERIAL

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The following deadlines prevail: Items to appear in the Newsletter published the 1st of each month must be submitted by the 20th of the previous month; items to appear in the Newsletter published the 15th of each month must be submitted by the 5th of each month.

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NEWSLETTER

INFORMATION FOR THE STAFF OF CLEMSON UNIVERSITY

Vol 11 No. 3

September 15, 1971

GIFTS AND GRANTS

Grants received by the University for the past three months include these from the National Science Foundation:

-- \$33,800 for a study of gas diffusion in non-Newtonian fluids, such as blood or molten nylon.

-- \$18,200 for a study, which could prove useful in understanding obesity, of certain bacteria's ability to regulate fat production.

-- \$3,375 in separate grants to six civil engineering professors to attend short courses.

Other grants include:

-- \$46,700 from various sources to support 23 research projects of the S.C. Agricultural Experiment Station.

-- \$34,594 from the Environmental Protection Agency, for two projects: grants for master's degree students studying to become operators and managers of wastewater treatment plants (\$26,924); and continued development of educational training programs for water pollution control personnel (\$7,668).

-- \$30,034 from the National Aeronautics and Space Administration, to continue research on the effects of a spacecraft environment on body microorganisms of animals.

-- \$24,872 from the National Institute of Mental Health, to strengthen the School of Nursing's mental health and psychiatric nursing program.

-- \$15,675 from the U.S. Army Research and Development Command, to develop a mathematical model for removing pesticides from wastewater streams.

-- \$10,000 from the U.S. Department of Health, Education and Welfare to continue development of a Clemson cooperative education program.

-- \$5,000 from Refractories Institute (Pittsburgh, Pa.), to support graduate research in ceramic engineering; \$1,400 from Burlington Industries Foundation, unrestricted grant; and \$1,000 from Dow Chemical Co., unrestricted grant for chemical engineering.

BLUE CROSS OPENS ANNUAL ENROLLMENT PERIOD

Representatives of Blue Cross - Blue Shield Insurance will be on campus Sept. 25 through Oct. 25. This is the annual enrollment period for group insurance available to all University faculty members and other employees.

During this enrollment period any member of the Blue Cross - Blue Shield program may make changes (additions or deletions) if desired to fit their individual and/or family needs. Initial applications will also be accepted during this period for those who desire insurance coverage through this plan.

New employees may apply for insurance coverage anytime during their first 31 days of employment. Other employees may apply for insurance or request changes in present coverage only during the annual enrollment period, Sept. 25 - Oct. 25. Employees presently enrolled and desiring no changes will be automatically continued and need not contact the representatives at this time. Appointment may be made with the representatives by telephoning Mr. W.J. Stamey in the Personnel Office, Ext. 2426.

DATES ANNOUNCED FOR NATIONAL AND RESTRICTED TESTS

Dr. Virginia S. Hardie, Director of the Counseling Center, announces the scheduled dates for the administration of national and restricted tests. She urges deans and department heads to remind students interested in graduate study to take special notice and secure applications for registration from the Counseling Center, Room 20, Tillman Hall, where all tests will be given.

Testing dates are:

Admission Test for Graduate Study in Business - Nov. 6, 1971 and Feb. 5, 1972.

Architectural School Aptitude Test - Nov. 20, 1971, Jan. 15, 1972 and March 25, 1972.

Dental Aptitude Test - Oct. 15, 1971, Jan. 7, 1972 and April 28, 1972.

Graduate Record Examination - Oct. 23, 1971, Dec. 11, 1971, Jan. 15, 1972, April 22, 1972 and June 17, 1972.

Graduate School Foreign Language Test - Oct. 9, 1971, Feb. 5, 1972, April 15, 1972 and July 22, 1972.

Medical College Admission Test Oct. 16, 1971, May 1972 (date to be announced).

Veterinary Aptitude Test - Jan. 8, 1972.

DATES ANNOUNCED FOR NATIONAL AND RESTRICTED TESTS Continued

The following special tests are given by appointment and for a fee: Miller Analogies Test; Minnesota Engineering Analogies Test; Doppelt Mathematical Reasoning Test; American Institute of Certified Public Accountants, Aptitude and Achievement Test; and specific tests for students transferring to other colleges and universities.

ATTENTION DEANS, DIRECTORS, DEPARTMENT HEADS

If your area is not receiving enough issues of the Clemson Newsletter in order to provide a copy to each member of your faculty and staff, please call Mr. Allen Sale (2061, 2062, 2063) in the Office of Public Relations and let him know how many copies you need.

FACULTY RESEARCH COMMITTEE GRANT APPLICATIONS

Proposals for Faculty Research Committee grants should be in the Office of University Research, 17 Tillman Hall not later than November 1, 1971. Application forms may be secured in the Office of University Research. Only proposals using the Faculty Research Committee application form will be considered by the Committee.

The Committee makes awards to new faculty members initiating research, to faculty members initiating research in a new area, and in areas where other sources of support are inadequate or nonexistent.

MINUTES OF THE MEETING OF THE FACULTY SENATE, JULY 13, 1971

President Sawyer called the meeting to order at 4:15 p.m. The minutes of the meeting of June 8, 1971 were approved with the correction of the spelling of the word acclamation on page 2, paragraph 3.

President Sawyer reported on her recent visits to the University Experiment Stations; she described the visits as informative and profitable. Meetings attended by President Sawyer were the Vending Machine Committee, the Educational Policy and Student Affairs Committee of the Board of Trustees, and the meeting of the Board of Trustees, where a limited visitation program in dormitories was approved in principle.

With regard to printing Ex-President Prochaska's 1970-1971 report of Faculty Senate activities in the Clemson Newsletter, President Sawyer requested the Senate to express its preference for printing the report in its entirety or perhaps printing a digest of the report. The consensus was a preference for the entire report to be printed, with only two Senate members favoring a digest.

President Sawyer had spoken with Mr. M. B. Farrar of the Office of Development and reported the action in response to the June 8 Senate resolutions concerning traffic control devices on campus: a recommendation to place a stop light at the intersection of Perimeter Road and Cherry Road, with right of way to Cherry Road

MINUTES OF THE MEETING OF THE FACULTY SENATE, JULY 13, 1971 Continued

and a trip switch on Perimeter Road, will be made by that Office to the Physical Plant; and Paragraphs 4-7 of the University Traffic Code, dealing with the right of way of pedestrians on crosswalks, will be printed in the Clemson Newsletter and given to the Tiger. The Senate expressed the desire that the Office of Development reconsider other portions of the resolution and moved and seconded as follows:

That the installation of some traffic control devices to break the flow of traffic on South Palmetto Boulevard during rush hours, thus allowing access to that road, be reconsidered. This was passed unanimously;

That the placing of a traffic control device, for example, a traffic light with a pedestrian push button, at the intersection of Calhoun Drive and Highway 93 be reconsidered. This was passed unanimously;

That the placing of a traffic light at the intersection of Fort Hill Street and Williamson Road to break traffic on Williamson at rush hours be reconsidered. This was passed with three dissenting votes.

It was also moved and seconded as follows:

That a three-phase traffic signal to replace the present light at the intersection of Highway 93 with South Palmetto Boulevard, with a left-turn phase facing westbound traffic to facilitate entrance to the campus during rush hours, be considered for installation at least until such time as the relocation of Daniel Drive and Seneca Road be accomplished. This motion passed unanimously.

President Sawyer presented a report to the Senate from Professor M. W. Jutras, the Senate's representative on the Committee of Administrators which has been considering the Senate's suggested revision of the faculty manual. Professor Jutras reported that Committee's work to be nearing completion, and a satisfactory resolution of all but a few disagreements on content. Professor J. A. Hash, at the request of Professor-Emeritus K. Lehotsky, requested that President Sawyer inquire into the status of the new manual's provision that faculty members be given a copy of their yearly evaluations by the administration.

President Sawyer announced the appointment of Professor Hewitt Adams to the Speakers Bureau and called for volunteers to serve as guides and drivers during new faculty orientation in the fall.

There was no report from the Policy Committee.

Professor B. J. Skelton reported for the Admissions and Scholarship Committee. He passed to the Senators data on the "Forgivable F," prepared by Mr. K. N. Vickery and Mr. R. J. Berry of the Office of Admissions and Registration, and a history of the origin of the "Forgivable F" as outlined from previous minutes of the Faculty Senate. The committee will continue its study of the matter using the above information.

MINUTES OF THE MEETING OF THE FACULTY SENATE, JULY 13, 1971 Continued

Professor N. D. Camper, Chairman of the Research Committee, called attention to the Clemson University Faculty Publications which is printed every 2 years and which contains listings of publications and presentations by faculty members. The Committee is continuing to discuss indirect costs as applied to grants; they will meet with Mr. R. W. Henningson and will bring information from that meeting to the Senate.

President Sawyer, reporting for the Welfare Committee, stated that Professor W. E. Castro, Chairman of that Committee, had toured certain areas of the Clemson House which may be used for a faculty club facility. The east end of the lobby, the putting green, and the Tiger Tavern would be available for use by the faculty. There is also the possibility for a faculty swimming pool. Ad Hoc Committee A on

Faculty Facilities in the Clemson House was formed with Professor J. D. Fulton appointed as chairman.

Professor D. R. LaTorre pointed out an error in the revised Constitution and By-Laws of the Faculty and Faculty Senate which had been distributed to Senate members, this being that the addition of the paragraph concerning the allocation of Senate seats should be placed under Article II Section 1 of the By-Laws of the Faculty and Faculty Senate rather than under Article I Section 1 of the Constitution. The correction will be made and corrected copies will be sent to Senators.

The meeting was adjourned at 5:20 p.m.

Absentees from the meeting were as follows: W. E. Johnston; C. E. Reick; W. E. Castro; A. R. Abernathy; E. A. Vaughn; B. C. Caffrey; W. F. Steirer; R. A. Godbout.

ANNUAL COMPETITION FOR OVERSEAS STUDY OPENS

The official opening of the 1972-73 competition for grants for graduate study or research abroad, and for professional training in the creative and performing arts was announced today by the Institute of International Education.

Annually, IIE is responsible for the recruitment and screening of candidates for U. S. Government Full and Travel Grants authorized under the Fulbright-Hays Act. For 1972-73, full grants are available to 29 countries and travel grants are available to 12 countries. Grants offered by governments, universities and private donors of 14 countries are also administered by IIE. Grants are available to every region of the world.

These awards are designed to promote mutual understanding between the people of the U.S. and other countries through the exchange of persons, knowledge and skills. It is expected that there will be at least 600 awards available for 1972-73.

ANNUAL COMPETITION FOR OVERSEAS STUDY OPENS Continued

Candidates must be U.S. citizens at the time of application, have a bachelor's degree or its equivalent before the beginning date of the grant and, in most cases, be proficient in the language of the host country. Except for certain specific awards, applicants may not hold or expect to receive the Ph.D. before the beginning of the grant.

Selection is based on the academic and/or professional record of the applicant, the feasibility of his proposed study plan, his language preparation and personal qualifications.

Preference is given to candidates between the ages of 20 and 35 and to those who have not had prior opportunity for extended study or residence abroad, with the exception of those who have served in the armed forces.

Creative and performing artists are not required to have a bachelor's degree, but they must have four years of professional study or equivalent experience. Applicants in social work must have at least two years of professional experience after the Master of Social Work degree. Applicants in the field of medicine must have an M.D. at the time of application.

Information concerning application may be obtained from one of the following:

Agriculture, Dr. R. K. Dehaven, 109 Long Hall
Architecture, Professor G. C. Means, 113 Lee Hall
Forest and Recreation Resources, Dr. J. R. Warner, 151 Plant and Animal
Science Building
Engineering, Dr. J. N. Thurston, 211 Riggs Hall
Education, Dr. W. W. Pennscott, 115-G Godfrey Hall
Industrial Management and Textile Science, Dr. R. H. Barker, 27 Sirrine Hall
Nursing, Miss Arlene Duvall, 709 Strode Tower
Liberal Arts, Dr. H. E. Stewart, 201-A Strode Tower
Physical, Mathematical, and Biological Sciences, Dr. M. J. Skove,
107 Kinard Lab of Physics

The deadline for filing applications through the Fulbright Program Adviser, on this campus is October 1, 1971.

AGRICULTURAL ECONOMICS - EXTENSION MARKETING

Additional faculty member - Dan L. McLemore, Associate Extension Specialist (Marketing); B.A., Presbyterian College; M.S., Ph.D., Clemson; Married, 1 child; Route 2, Bayshore, Seneca.

AGRICULTURAL ECONOMICS AND RURAL SOCIOLOGY

J. C. Hite (Assoc Prof) presented an invited paper entitled "An Economic-Ecologic Model for Evaluating the Reprecussion of Area Development" at the annual meeting of the American Agricultural Economics Association, Southern Illinois University at Carbondale on Aug. 17. Co-author was E. A. Laurent of Georgia Tech, a Ph.D. alumnus of Clemson.

Dr. Hite has been elected to a two year term on the Executive Council of the Southern Regional Science Association.

COLLEGE OF ARCHITECTURE

Ralph E. Knowland (Assoc Prof and Hd, Dept of Building Science) presented a paper on "Work Methods Improvement" to the Piedmont General Contractors Association on May 20. The paper was based on a time-lapse film study carried out by building construction students during the spring semester, 1971.

R. D. England (Assoc Prof) attended the meeting of the Mediaeval Academy of America in Chapel Hill on Apr. 16-17 and delivered a paper "The Sacred Geometry of Chartres Cathedral, II" at the conference on Mediaeval Studies, May 19-22.

John T. Acorn (Assoc Prof) is one of fifteen sculptors to be represented in the exhibition: Southern Sculpture '71. This exhibition will be shown in seven museums and universities throughout the Southeast.

CHEMISTRY

Recent publications by Chemistry faculty members:

A. R. Pinder (FHH Calhoun Prof) and A. K. Torrence (Grad Stu), "Total Synthesis of Racemic Fukinone," Tetrahedron Letters, 745 (1971).

A. L. Beyerlein (Asst Prof), "High Density Hard Square Particles Approaching a Close Packed 'Brickwall' Configuration," Journal of Computational Physics, 7, 403, (1971).

DAIRY SCIENCE

J. F. Dickey (Assoc Prof) attended a 3-weeks short course on Histochemistry at Nashville, Tenn., Aug. 2-20, sponsored by NSF.

ENGLISH

Harriet Holman (Prof) had an article, "U.S. Intervention in the Panamanian Constitution" published in American Notes and Queries, June, 1971.

ENTOMOLOGY AND ECONOMIC ZOOLOGY

S. B. Hays (Assoc Prof and Hd) attended and participated in the Tri-State Pest Control Meeting at the Mariott Motor Hotel in Atlanta, Ga. on Aug. 20. At the meeting plans were formulated for the PCO School to be held at Clemson early in 1972.

R. F. Nash, Jr. (Asst Prof) presented results of research efforts to control ornamental insect pests to the Southern Nurserymen's Association Meeting in Atlanta, Ga., Aug. 1-4.

The South Carolina Turkey Federation and the Southeastern Poultry and Egg Association have awarded a Grant-in-Aid of \$42,000 to this department for research on the vectors and spread of leucocytozoon disease in turkeys. This work will be supervised by Ray Noblet (Asst Prof) and J. B. Kissam (Ext Ent).

CIBA-Geigy has awarded a \$3312 grant-in-aid to the department for a study on the residue deposition of GS13005 (chigger pesticide) and its metabolic products in turkeys on treated ranges. This work will be performed under the supervision of T. R. Adkins, Jr. (Prof).

R. C. Fox (Prof) and Alton I. Walker (Grad Res Asst) attended the 16th Annual Southern Forest Insect Work Conference in New Orleans, La., Aug. 9-12. Dr. Fox served as conference chairman for the second year and was moderator of a panel on Wood Products Insects Research and/or courses at Universities. Mr. Walker presented the Clemson University program in these areas on this panel.

ENVIRONMENTAL SYSTEMS ENGINEERING

J. F. Andrews (Prof and Hd) presented a paper entitled "Introduction to Automatic Control" at the American Association of Professors in Sanitary Engineering Workshop, University of Calif. (Irvine), Aug. 16. Professor Andrews also served as co-chairman of the workshop. Dr. Andrews presented a seminar on "Control of Wastewater Treatment Plants" to students and faculty at Florida Technological University, Orlando, Aug. 9.

T. M. Keinath (Asst Prof) presided at a session of the workshop entitled "Instrumentation and Automation of Wastewater Treatment Plants" which was sponsored by the American Association of Professors in Sanitary Engineering and held at Newport Beach, Calif., Aug. 16-18.

ENVIRONMENTAL SYSTEMS ENGINEERING Continued

T. M. Keinath was awarded a renewable research contract entitled "Mathematical Modeling of Heterogeneous Sorption in Continuous Contractors for Waste-water Decontamination" by the Department of the Army, Medical Research and Development Command. The initial award was \$15,675 for the period Aug. 1, 1971 to July 31, 1972.

Wade H. Ponder (Training Coordinator) will be the banquet speaker at the tenth annual meeting of the Southeastern Industrial Arts Conference on Oct. 8 in Atlanta, Ga.

John H. Austin (Prof) and James M. Glennon (Assoc Dir Cont Educ in ESE) have been appointed by Governor John C. West as members of the S.C. Board of Certification of Public Water Treatment Plant Operators for a term to expire July 10, 1974.

FACULTY FRATERNITY MEMBERS

The chapters of national social fraternities located on the Clemson campus are interested in identifying faculty and staff who are members of national social fraternities. It would be appreciated if those who are members would report their affiliation to telephone number 2153 or 3422.

GEOLOGY

V. S. Griffin (Assoc Prof) has recently published "The Inner Piedmont Belt of the Southern Crystalline Appalachians," Geological Society of America Bulletin, 82, 1885 (1971); and "Stockwork Tectonics in the Appalachian Piedmont of South Carolina and Georgia," Geologische Rundschau (Stuttgart), 60, 868 (1971).

HORTICULTURE

J. R. Haun (Assoc Prof) attended a two-week (July 3-17) institute at VPI entitled, "The Plant Root and Its Environment," sponsored by the Southern Regional Education Board. He had also represented Clemson University on the planning committee for this institute. Approximately 100 representatives of the states within SREB attended the institute.

A paper entitled, "Detection and Evaluation of Plant Growth Responses to Environmental Conditions," by A. J. Lewis III (Grad Stu) and J. R. Haun was published in the American Journal of Botany, May-June issue, 1971.

J. R. Haun received a Federal Government contract in the amount of \$19,539 for research on the influence of environmental factors on crop production. This contract brings the total amount to date for this program to \$121,221.

INDUSTRIAL EDUCATION

A. F. Newton (Prof and Hd), F. A. Bosdell (Asst Prof) and B. V. Burkett (T&I Ed. Materials Writer) conducted a panel discussion on "Multimedia for Trade and Industrial Education" at the Trade and Industrial Conference held at Winthrop, Aug. 18. Prof. Bosdell also served as moderator for the occupational group meeting "Identification of and Solutions to T&I Teaching Problems in Electricity, Electronics, Radio and TV."

J. P. Crouch (Assoc Prof) was a guest speaker at the conference of International Graphic Arts Education Association in St. Paul, Minn., Aug. 15-20. His topic was "Interpreting the Graphic Arts Industry to Students in Graphic Communications."

INTERDISCIPLINARY STUDIES

M. J. Eitel (Assoc Prof) presented two invited lectures on Aug. 26 at the University of Massachusetts in Amherst, Mass. The titles of his presentations were "Useful Carbon Products from Pyrolytic Decomposition of Polymer Waste Materials" and "Incineration of Flame Retardant Polymer Materials."

MATHEMATICAL SCIENCES

J. V. Brawley, Jr. (Assoc Prof), R. C. Laskar (Assoc Prof), Carolyn F. Pellerin (Grad Stu) and Henry A. Pellerin (Grad Stu) participated in Advanced Combinatorial Seminar held at Bowdoin College, Brunswick, Maine from June 22 - Aug. 12. Professor Brawley presented a seminar lecture entitled, "Some Matrix Enumeration Problems Related to Algebraic Cryptography," and Professor Laskar delivered two seminar lectures entitled, "Finite Nets of Dimension Three," and "On Chromatic Numbers of Graphs."

B. J. Prochaska (Asst Prof) presented a paper entitled "Applications of Generalized Inverses to Estimation in a Dynamic System" at the Joint Automatic Control Conference 1971, in St. Louis, Mo. on Aug. 13.

Eugene Park (Assoc Prof) represented the Clemson Chapter at the seventy-fifth anniversary convention of the Honor Society of Phi Kappa Phi at the University of Maine at Orono, Aug. 15-18. It was announced at the meeting that Mark G. Savitsky, Clemson's 1971 nominee for a Phi Kappa Fellowship, was one of 10 winners among applicants from 128 colleges and universities across the nation.

NURSING

Dean Geraldine Labecki has been appointed to the Appalachian Region Health Policy and Planning Council.

NURSING Continued

Dean Labecki is a member of the Statewide Planning Committee for Nursing Education, a committee organized under the auspices of the Commission on Higher Education.

PHYSICS

A. L. Laskar (Assoc Prof) co-authored an article with A. P. Batra, G. Brebec, and L. Slifkin entitled "Impurity tracer diffusion in silver halides" published in the book Diffusion Processes edited by J. Sherwood et. al (Gordon & Breach, 1971).

Beverly B. Bookmyer (Assoc Prof) participated in a colloquium of the International Astronomical Union held at the University of Pennsylvania, Philadelphia, Sept. 8-11.

L. D. Huff (Emeritus Prof) will speak at the Physics Colloquium on Sept. 16 at 4:00 p.m. on the subject "Quasi Steller Motion" in Rm 101, Kinard Lab of Physics.

D. P. Miller (Assoc Prof) presented two papers at the American Crystallographic Association meeting at the University of Iowa. The papers were entitled "The Crystal and Molecular Structure of Tris" and "The Crystal and Molecular Structures of the Simple Salt Adducts of pp'-diaminodiphenylbutane (DPB)."

R. L. Chaplin (Assoc Prof) will be taking sabbatical leave to work with Dr. Werner Schilling, the Director of the Institut fur Festkorperforschung at Julich, West Germany, from January through August, 1972.

SOCIAL SCIENCES

Bernard Caffrey (Assoc Prof) published a paper entitled "Effects of saturated and unsaturated fats on learning, emotionality, and reaction to stress" in the July issue of Psychological Reports. The paper was written with M. Y. Patterson who is now a graduate student at Tulane University. Dr. Caffrey and G. E. Kost of the University of Texas School of Public Health, published a paper "Student Evaluation of a Public Health Curriculum" in the May issue of the American Journal of Public Health.

W. C. Capel (Asst Prof) presented with B. Goldsmith, K. Waddell and G. T. Stewart, Tulane Medical Center, "Demographic and Sociological Implications of Addiction in New Orleans: Consideration of Treatment Modalities," at the International Symposium on Drug Tolerance, Addiction, Abuse and Methadone Treatment at Xavier University, New Orleans, Aug. 15-18. Professor Capel also chaired a section on Human Behavioral Response.

John LeBourgeois (Instr) published "J. A. Symonds to Katherine Bradley: An Unpublished Letter," in the March issue of Notes and Queries. He also published "D. G. Rossetti in the Private Books of Frederick Locker-Lampson and Lady Mount-Temple" and "A Rossetti-Morris Letter" in the July issue of Notes and Queries.

SOCIAL SCIENCES Continued

J. E. Sargent (Instr) has completed oral histories with the late Adolph A. Berle, Jr., former F. D. Roosevelt Brains Trustee and New Dealer, and Walter Wyatt, former general counsel of the Federal Reserve Board, for the Oral History Research Office, Columbia University.

U. S. ARMY ROTC

Colonel G. K. Maertens, (Prof of Military Science) appeared on 'Today in the Piedmont', a locally produced television program narrated by Peggy Denny on Aug. 30. Accompanying Colonel Maertens were Clemson students Lt. James Bostic and Cadet Colonel Joseph Anderson. The purpose of their appearance was to discuss briefly the Clemson University ROTC program and to emphasize that as times have changed, so has the Army.

ZOOLOGY DEPARTMENT

William Bachop (Asst Prof) visited the Institute of Marine Sciences (Morehead City, N.C.) and the Chesapeake Biological Laboratory (Solomons, Md.) to make arrangements whereby Clemson University graduate students could obtain marine fish eggs and larvae. Ways that Clemson University graduate students might participate in the upcoming Marine Resources Monitoring Assessment and Prediction Program were discussed with federal biologists at the Center for Estuarine and Menhaden Research, Beaufort, N. C.

E. D. Brodie, Jr. (Asst Prof) published a paper (with R. A. Nussbaum, Oregon State University) entitled, "The taxonomic status of the rough-skinned newt, *Taricha granulosa* (Skilton), in the Rocky Mountains," in *Herpetologica* 27 (3):260-270. Dr. Brodie presented a nature lecture on "Reptiles" at Oconee State Park Aug. 28.

THURSDAY MORNING QUARTERBACK CLUB

The Fort Hill Clemson Club will sponsor a Thursday morning quarterback club breakfast during the 1971 football season. Each Thursday morning at 7:00 o'clock Coach Hootie Ingram will be on the hot seat to answer questions, and survey the upcoming opponent. The club will meet in Harcombe Commons each week continuing through November 24 (the last meeting will be on a Wednesday preceding Thanksgiving). Breakfast will be served for those who wish to eat, 80 cents each. Coach Ingram will begin his presentation at 7:20 and the program will conclude by 7:50 a.m.

CALENDAR OF CAMPUS EVENTS

- Sept. 15 Wed. 10:00 a.m. Industrial Management and Textile Science Seminar Series - Mr. Raymond Shockley, Vice President and Executive Director of S.C. Textile Manufacturers Association, Columbia, S.C. - Sirrine Hall Auditorium.
- Sept. 15 Wed. 3:30 p.m. Food Science Seminar, W.C. Horton, Jr., State Environmental Program, Columbia, S.C., will speak on "Food Protection Programs in South Carolina." P&AS Bldg. Room F-150.
- Sept. 17- Fri.-
Sept. 18 Sat. The Tenth Anniversary of the Southeastern Invitational Conference on Measurement in Education, co-sponsored by Clemson University and Harcourt Brace Jovanovich, Test Department, Clemson House.
- Sept. 18 Sat. No football game.
- Sept. 18 Sat. Soccer - Warren Wilson.
- Sept. 20 Mon. Jewish New Year.
- Sept. 22 Wed. 3:30 p.m. Food Science Seminar - Mrs. Marie S. Hindman, Clemson University, will speak on "The Expanded Food and Nutrition Education Program" - P&AS Bldg., Room F-150.
- Sept. 24- Fri.-
Oct. 20 Wed. Architectural Exhibit - "Ceramics By Tom Turner" - Lee Gallery.
- Sept. 24 Fri. 2:00 p.m. Freshman Football - Duke at Durham, N.C.
- Sept. 24 Fri. Continuing Engineering Education - High School Teachers Workshop (Interactive Computing) - Riggs Hall.
- Sept. 25 Sat. 1:30 p.m. Varsity Football - Georgia at Clemson.
- Sept. 25 Sat. Soccer - at Jacksonville.
- Sept. 25 Sat. Cross Country at Stone Mt., Ga.
- Sept. 25 Sat. CDA Concert.
- Sept. 27 Mon. 7:00 p.m. Foreign Film, The Devil Strikes at Night (German) Daniel Hall Theatre - free.
- Sept. 28- Tues.-
Oct. 19 Tues. Architectural Exhibit - "Fantastic Realism-Contemporary Prints" - Lee Gallery.

CALENDAR OF CAMPUS EVENTS Continued

Sept. 28-	Tues.-		Continuing Engineering Education - Water and Wastewater Treatment Plant Operators School - Classes to be held at Clemson University at Sumter and Sumter TEC.
Oct. 1	Fri.		
Sept. 29	Wed.	11:15 a.m.	Agronomy - Dr. A.B. Phillips, TVA, Muscle Shoals, Alabama, Production, Marketing and Use of Phosphate Fertilizer I - A-203 P&AS Bldg.
Sept. 29	Wed.		Soccer - Appalachian State.
Sept. 29	Wed.		Jewish Yon Kippur.
Sept. 29-	Wed.-		The Second Annual Clemson Reading Conference "Right on With Reading," dealing with guidance, research, and classroom instruction. For information contact Clemson Reading Conference, Godfrey Hall, Clemson University.
Oct. 1	Fri.		
Sept. 29	Wed.	3:30 p.m.	Food Science Seminar - Mr. Cleve Noel, Manager, C.F. Sauer Co., Greenville, S.C., will speak on "The Manufacturing of Mayonnaise." Room F-150 P&AS Bldg.
Sept. 30	Thurs.	11:15 a.m.	Agronomy - Dr. A.B. Phillips, TVA, Muscle Shoals, Alabama, Production, Marketing and Use of Phosphate Fertilizer II - A-203 P&AS Bldg.

PROCEDURES FOR SUBMITTING NEWSLETTER MATERIAL

All Calendar items of campus events (speakers, films, meetings, seminars, sporting events, etc.) should be submitted by written memorandum directly to the Office of Public Relations, Trustee House. Information and news items from the Office of the President, Vice President for Business and Finance, Vice President for Executive Affairs, Vice President for Student Affairs and the Vice President for Development should be submitted by written memorandum to the Office of Public Relations, Trustee House. Information and news items from all areas under the Vice President for Academic Affairs should be submitted by written memorandum to Dr. Claud B. Green, Room 28, Tillman Hall.

The following deadlines prevail: Items to appear in the Newsletter published the 1st of each month must be submitted by the 20th of the previous month; items to appear in the Newsletter published the 15th of each month must be submitted by the 5th of each month.

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NEWSLETTER

INFORMATION FOR THE STAFF OF CLEMSON UNIVERSITY

Vol. 11 No. 4

October 1, 1971

INFORMATION FROM STATE BUDGET AND CONTROL BOARD ON SALARY FREEZE

Clemson University has received the following memorandum, dated September 9, 1971, from the South Carolina State Personnel Division:

TO: All Agencies, Departments and Institutions

In order to comply with the salary freeze ordered by the President, the State Budget and Control Board has approved the following practices under the Classification and Compensation Plan for the duration of the freeze order, i.e. August 15 through November 13, 1971.

1. Normal increments will not be authorized (That is, no "in-grade" or "merit" increases).
2. No upward reallocation of positions will be approved, whether a single position or a class of positions. (That is, no reclassification that results in the assignment of a position or positions to a salary grade higher than the one presently assigned).
3. No salary increases will be approved that are predicated upon a reallocation of an individual position or a class of positions to a higher grade, even though such reallocation was effected prior to August 15, 1971.
4. Bona fide promotions that constitute an advancement to an established position in a higher salary grade are allowed. ("Established position" is defined as (a) one that existed and was classified prior to the freeze and in which there has been a previous incumbent or (b) one that has been established due to a new or expanded program that did not previously require such a position, has been properly classified, and for which approval is obtained by the agency from the Personnel Division prior to promotion.)
5. New positions may be established and filled as herein stated with prior classification and compensation approval by the Personnel Division.
6. New employees may be hired in properly classified positions in accordance with established guidelines.

INFORMATION FROM STATE BUDGET AND CONTROL BOARD ON SALARY FREEZE Continued

All increments approved and made effective prior to August 15, 1971, are unaffected. Any Personnel Actions approved by this office prior to August 15, 1971, with indicated effective dates after August 15, are cancelled and rescinded, except for bona fide promotions.

Any questions concerning the above should be made in writing to this office.

Your cooperation and understanding are appreciated.

Yours truly,

F.E. Ellis
State Director of Personnel

MINUTES OF ADMINISTRATION - FACULTY - STUDENT COUNCIL MEETING, SEPT. 10, 1971

Chairman Joseph Hutchinson called to order the regular meeting of the AFSC a 1:10 p.m., Friday afternoon, September 10 in the Student Governement board room.

The following were present: Chairman Hutchinson, Corinne Sawyer, Manning N. Lomax, Fred J. Keller, Angela Prince, E.H. McCarter, John D. Marshall, Vernon Hodges, Secretary George Moore. Absent was A. Wood Rigsby.

ACTION: A motion by Dr. Sawyer that the minutes of the organizational meeting of September 1, 1971 be approved as distributed was duly seconded and passed.

Mr. Moore asked the Council to specify for the record a policy on distribution of approved minutes of AFSC and to define a quorum as it relates to this Council.

ACTION: Dr. Sawyer's motion that a quorum be defined as six voting members of the Council, including at least one representative from each area (administration, faculty, student), was seconded and adopted.

ACTION: A motion by Dr. Sawyer specifying distribution of the minutes of AFSC to each member of the Council, the President of the University, the five Vice Presidents and the Presidents of the Student and Faculty Senates was seconded and passed.

Dr. Hodges asked the Council to consider possible expansion of the distribution.

ACTION: A motion by Dr. Sawyer that the Council follow precedence set by the previous AFSC and forward approved minutes of AFSC meetings to the University Publications Office for use in the Newsletter, was seconded and passed.

Chairman Hutchinson opened discussion on the forgivable "F" subject. Dr. Hodges reviewed briefly the history and background of the current system, how it developed, etc., and then all representatives shared in a discussion on present proposals and thinking on the subject.

MINUTES OF ADMINISTRATION-FACULTY-STUDENT COUNCIL MEETING, SEPT. 10, 1971 Continued

Dr. Hodges' motion calling for adoption of the Forgivable "F" proposal as it was resolved by the Faculty Senate last year was not seconded. Mr. Lomax suggested that the Council might invite a representative of the Administration to visit with the Council and discuss the subject.

ACTION: A motion by Mr. Lomax that the Chairman issue an invitation to Dean Kenneth Vickery to visit with the Council on September 17 was seconded and passed.

Chairman Hutchinson called for discussion on the Pass-Fail agenda item.

Dr. Keller noted that a Faculty Senate Committee (the Admissions and Scholarships Committee) was going to initiate a study of the system. Other faculty representatives pointed out that any study of the Pass-Fail system should give careful attention to resolution of questions that could arise as a result of the initiation of such a system (i.e. determining participation in national societies, honor organizations, intercollegiate athletics). The Council deferred further discussion on the question and suggested that this, too, would be a subject to consider with Dean Vickery.

Without objection, the Chairman called adjournment at 2:00 p.m.; the next meeting of the Council to be Friday, September 17, 1:10 p.m., Student Government Board Room.

MORE ABOUT 1972 AUTO LICENSE PLATES

South Carolina automobile license plates went on sale Monday, September 20, in every county. They must be on cars by November 16, 1971, to avoid a fine and a penalty. Before any plates can be purchased, one Form 406 must be secured from a County Treasurer after payment of 1971 taxes due on all automobiles owned by the taxpayer. Each owner living within a city (or incorporated town) should secure a tax receipt to certify that 1971 municipal taxes due on his automobile(s) also have been paid.

After Form 406 has been received, 1972 plates may be purchased at any SCHD office. Offices nearest to Clemson are open Monday through Friday, (8:30 to 5:00), and are located in Seneca (S. 4th St.), Pickens (Ann St., U.S. 178), and Anderson (1206 Gadsden St.). Mail orders are accepted only at the South Carolina Highway Department; Motor Vehicle Division, P.O. Box 1498, Columbia, S.C. 29202. Include Form 406, plus 50¢ extra for shipping each set of plates. Personal checks accepted. Allow 4 weeks for delivery by mail.

County and city taxes on real property may be paid without penalty at any time before December 31.

ORDERS FOR FACULTY-STAFF SEASON BASKETBALL TICKETS NOW BEING ACCEPTED

University ticket officials have announced that orders for basketball season tickets are now being accepted from faculty and staff members.

ORDERS FOR FACULTY-STAFF SEASON BASKETBALL TICKETS NOW BEING ACCEPTED Continued

The Tigers, under head coach Tates Locke, will play 10 games in Littlejohn Coliseum during the 1971-72 season, headed by defending NIT champion North Carolina.

The home schedule also includes Purdue, Maryland, defending Southern Conference champion Furman, Virginia Tech, NIT runner-up Georgia Tech, Virginia, South Carolina, Wake Forest, and Duke.

Season tickets for faculty and staff members are \$16.25 each and may be purchased at the Fike Field House ticket office which is open Monday-Friday from 8:00 a.m. to 4:30 p.m. Priority deadline for ticket orders is November 1.

UNIVERSITY CHAPTER OF THE AMERICAN ASSOCIATION OF UNIVERSITY PROFESSORS ELECTS NEW OFFICERS

The Clemson Chapter of The American Association of University Professors elected the following new officers on September 7 to serve for the 1971-72 academic year.

President - Michael W. Jutras (Agronomy and Soils)

Vice President - Malcolm Skove (Physics)

Secretary-Treasurer - Alfred L. Recoulley (English)

Executive Committee Members - Hewitt Adams (History) and Everett Laitala (Industrial Engineering)

Membership meeting will soon be announced.

DEVELOPMENT OFFICE

Millard B. "Speck" Farrar, director of planning and corporate relations in the University's Office for Development, retires October 1. James L. Strom, manager of process control with Continental Can Company, Inc. in Augusta, Ga. for the past six years, succeeds Farrar.

Farrar has held the post since January 1968. He was previously with Union Carbide Corp., serving in various management and engineering capacities for 39 years. He plans to do consulting work after retirement.

Strom, a native of McCormick, S.C., received his bachelor's degree in electrical engineering from the University in 1956 and also holds the bachelor's degree in business administration from Augusta College. He has also taken graduate courses at Augusta College and Georgia Southern toward completion of a master of business administration degree.

Strom is married to the former Margaret Adams of Moultrie, Ga. They have four children, two boys and two girls.

STANDING COMMITTEES OF THE UNIVERSITY 1971-72

1. Admissions. The Dean of Admissions and Registration serves as chairman ex-officio and the Registrar is an ex-officio member. The committee makes specific recommendations to the President in cases of individual student petitions. The committee deals not only with original admission problems, but with aspects of continuing enrollment.

K. N. Vickery (Chairman, ex-officio)

Eugene Park (Math)	1972	H. H. Williamson (Arch)	1973
Aileen Prevost (Nurs)	1972	B. M. Cool (For)	1974
B. J. Skelton (Hort)	1972	G. S. Rent (SocSci)	1974
R. C. Harshman (ChE)	1973	R. J. Berry (<u>ex officio</u>)	
W. W. Pennscott (Educ)	1973	Perry D. Holcombe, Student Representative	
E. A. Vaughn (Text & FacSen)	1973	Carol W. Armfield, Student Representative	

2. Athletic Council

K. N. Vickery (Chairman)

Corinne Sawyer (FacSen)	1972	R. W. Moorman (EM)	1973
T. D. Efland (IM & TS)	1972	J. L. Young (Arch)	1974
B. J. Prochaska (Math)	1972	J. V. Reel (SocSci)	1974
W. J. Lanham (AgEcon) Secretary	1973		

3. Curricula. Ex-officio members are the President of the Faculty Senate, the Dean of Admissions and Registration, and the Dean of the University, who acts as chairman. Faculty members of the committee are chairmen of school or college curriculum committees. The University Curricula Committee recommends to the Educational Council the addition or deletion of existing curricula and specific changes within curricula.

Victor Hurst (Chairman, ex-officio)

R. H. Hunter (Arch)	1972	B. D. Barnett (PoulSci)	1974
F. J. Keller (Physics)	1972	J. H. Rodgers (AgEduc)	1974
Regina Thompson (Nurs)	1972	Corinne Sawyer (FacSen, <u>ex-officio</u>)	
L. W. Gahan (RPA)	1973	K. N. Vickery (Adm & Reg, <u>ex-officio</u>)	
D. W. Lyons (Text)	1973	Robert F. Hawthorne, Student Representative	
W. H. Owens (SocSci)	1973	Thomas O. Young, Student Representative	
M. L. Wolla (EE & CompE)	1973	9 Academic Deans and 3 University Deans	

STANDING COMMITTEES OF THE UNIVERSITY 1971-72 (continued)

4. Advisory Committee on Ethics and Religion. This committee makes recommendations to the President concerning matters of relationship between the student body and campus and community religious organizations. Committee membership includes the Vice-President for Student Affairs, the Vice-President for Academic Affairs, the ministers of local churches, and the director of the YMCA. The committee recommends its chairman for appointment by the President.

C. E. Raynal (Chairman)

W. E. Copenhaver	W. T. Cox (V-P for Student Affairs)
T. C. Davis	Victor Hurst (V-P for Academic Affairs)
Thomas Murphey	B. E. Trent (Director of the YMCA)
H. R. Reynolds	
Luke B. Smith	

5. Faculty Basic Research. This committee controls expenditures of funds granted to it for use by the faculty in carrying out basic research. Committee funds include income from a gift to the University by the C. W. Kress Foundation, an annual grant from the Alumni Loyalty Fund, and a sum from NSF. Members of the faculty who wish to apply for research grants may do so directly to the committee chairman. Grants may be made for publication as well as for research itself.

R. W. Henningson, Asst. Dean of Univ. Research
(Chairman, ex officio)

W. E. Bachop (Zool)	1972	C. C. Fain (CrE)	1974
M. G. Melaragno (Arch)	1972	D. M. Hendricks (FdSci)	1974
E. P. Stillwell, Jr. (Phys)	1972	D. W. Lyons (Text)	1974
C. B. Caffrey (SocSci & FacSen)	1973	M. A. Wilson (V-P for Bus. & Finance, <u>ex-officio</u>)	
Earl Carpenter (AgEd)	1973	Perry D. Holcombe, Student Representative	
Rose Godbout (Nurs)	1973	Charles Froneberger, Student Representative	
C. L. Lane (For)	1973		

STANDING COMMITTEES OF THE UNIVERSITY 1971-72 (continued)

6. Fine Arts Series. In July 1965 President Edwards appointed a Fine Arts Series Committee to assist in planning, coordinating, and publicizing these activities. By acting as a clearing agency where ideas and information can be exchanged, the committee hopes that the cultural environment of the University community can be enhanced. It is planned to issue a master calendar of events from time to time and to maintain special announcements for the art exhibitions, the concert series, and the lecture series.

J. H. Butler (Chairman)

W. B. Barlage (ChE)	1972	H. M. Cox (<u>ex-officio</u>)
R. D. Shannon (Econ & FacSen)	1972	W. T. Cox (<u>ex-officio</u>)
W. E. West (IndEd)	1972	C. B. Green (<u>ex-officio</u>)
Melba Cather (Nurs)	1973	H. E. McClure (<u>ex-officio</u>)
G. E. Howard (RPA)	1973	K. N. Vickery (<u>ex-officio</u>)
J. J. McLaughlin (Engl)	1973	Beth Dianne Sutker, Student Representative
B. D. Barnett (PoulSci)	1974	David K. Riddle, Student Representative
M. C. Palmer (CC & Math)	1974	Frampton Durban, Student Representative
James Dalton (Arch)	1974	

7. Graduate Council. This council recommends Graduate School policy to the President via the Dean of the University.

A. E. Schwartz, Dean of Graduate Studies
and University Research (Chairman)

C. R. Smith (Ind Mgt)	1972	C. R. Freeze (Educ)	1974
J. S. Wolf (IntStud)	1972	G. C. Means (Arch)	1974
R. M. Allen (For)	1973	Paul W. Mims, Student Representative	
C. W. Bolen (SocSci)	1973	James Bostic, Student Representative	
H. W. Graben (Phys)	1973		
N. D. Camper (PlantPath & FacSen)	1974		

STANDING COMMITTEES OF THE UNIVERSITY 1971-72 (continued)

8. Honors and Awards. This committee nominates students for special annual awards for academic achievement and arranges the program for the annual University Honors and Awards Day.

Norman Olsen, Jr. (English, Chairman, ex-officio)

J. D. Davenport (SocSci)	1972	W. C. Whitten (Econ)	1974
J. D. Fulton (Math & FacSen)	1972	A. M. Bloss (<u>ex-officio</u>)	
Susan Rockwell (Nurs)	1972	G. E. Coakley (<u>ex-officio</u>)	
N. R. Bauld (EM)	1973	Susan Delony (<u>ex-officio</u>)	
R. H. Hunter (Arch)	1973	K. N. Vickery (<u>ex-officio</u>)	
J. T. Lazar (DySci)	1973	Carl M. Poe (Phi Eta Sigma)	
J. R. Warner (For)	1973	Jerome C. Wells (Phi Kappa Phi)	
H. E. Morgan, Jr. (IndEd)	1974		

9. Honors Program Council. This council recommends policy (including curricula and standards of admission) concerning the University Honors Program.

Norman Olsen, Jr. (English, Chairman)

Peter Lee (Arch)	1972	P. B. Burt (Phys)	1974
M. A. Packer (Educ)	1972	J. D. Maxwell (Agron)	1974
R. D. Shannon (Econ)	1972	Patricia Wannamaker (Lang)	1974
B. E. Gilliland (EE & CompE, FacSen)	1973	C. B. Green (<u>ex-officio</u>)	
Elizabeth Hall (Nurs)	1973	K. N. Vickery (<u>ex-officio</u>)	
Sarah Walker (RPA)	1973	Jerome C. Wells, Student Representative	
		Melody Baker, Student Representative	

STANDING COMMITTEES OF THE UNIVERSITY 1971-72 (continued)

10. Improvement of Undergraduate Teaching. A standing committee, appointed in 1966 for the first time, to recommend ways and means of improving undergraduate teaching and undergraduate educational programs.

R. H. Barker (1972, IM&TS, Chairman)

D. E. Maurer (IndEd)	1972	Spurgeon Cole (SocSci)	1974
Regina Thompson (Nurs)	1972	D. W. Bradbury (Engr)	1974
E. P. Willey (FacSen)	1972	T. E. Skelton (Agri)	1974
John Acorn (Arch)	1973	T. Steve Dennis, Student Senate Designee	
M. J. Skove (Phys)	1973	Michael N. Hunt, Student Representative	
J. L. Stevenson (RPA)	1973	Joseph F. Anderson, Jr., Student Repr.	

11. Library. A faculty committee (with the Director of the Library as an ex-officio member) which recommends library policy to the Dean of Undergraduate Studies. The committee elects its chairman.

M. W. Jutras (1972, Agron, Chairman)

Opal Hipps (Nurs)	1972	W. E. Bachop (Zool)	1974
Max D. Sherrill (FacSen)	1972	Elizabeth Galloway (Educ)	1974
H. H. Wilson (CrE)	1972	D. B. Stafford (CE)	1974
R. J. Calhoun (Engl)	1973	Gordon Gourlay (<u>ex-officio</u>)	
R. E. Knowland (Arch)	1973	Patrick R. Watts, Student Representative	
R. E. Shoenike (For)	1973	Student Senate Designee	
J. M. Wannamaker (IM)	1973		

12. Patent Committee. This committee makes recommendations to the President concerning all University patent matters in accord with the Patent Policy as printed in the Faculty Manual.

M. A. Wilson (Chairman, ex-officio)

Melvin Barnette (BusFin)	1972	E. F. Coxie (ME)	1974
M. J. Skove (Phys)	1972	T. D. Efland (IM&TS, <u>ex-officio</u>)	
C. E. Hood (AgE)	1973	O. B. Garrison (ExpSta, <u>ex-officio</u>)	
E. B. Rogers (AgE & FacSen)	1973	S. F. Hulbert (Engr, <u>ex-officio</u>)	
W. W. Coffeen (CrE)	1974	S. G. Nicholas (V-P for Development, <u>ex-officio</u>)	

STANDING COMMITTEES OF THE UNIVERSITY 1971-72 (continued)

13. Safety and Fire Prevention Committee. This committee will counsel and support the University Safety Coordinator (Secretary to the committee) and assist in the development of safety policies and programs.

C. E. Littlejohn (Chairman)

J. P. Burns (CommCenter)	1972	W. E. Berry (Personnel, <u>ex-officio</u> , Secretary)
K. S. Landers (Chem)	1972	J. E. Hair (MedCenter, <u>ex-officio</u>)
A. D. Lewis (ME)	1973	N. R. Page (AgChem, <u>ex-officio</u>)
J. A. Gilreath (Phys)	1974	J. W. Weeden (PhysPlant, <u>ex-officio</u>)
E. Iaitala (IE)	1974	J. B. McFadden (Athletic, <u>ex-officio</u>)
E. H. McCarter (BusFin)	1974	W. E. Allison, Jr., Student Representative
J. A. Stanley (PhysPlant)	1974	

14. Schedule. A committee which develops each semester the master schedule of courses taught. Each school or college has appropriate representation.

K. N. Vickery (Chairman)

H. D. Adams (SocSci)	H. G. Lefort (CrE)
G. W. Anderson (Zool & MicroBiol)	W. R. Mattox (Adm)
R. P. Ashworth (Bot & Biochem)	C. M. McGee (Engl)
W. C. Bowen (Educ)	C. M. McHugh (EngrSer)
D. W. Bradbury (ME)	R. F. Nowack (EM)
L. H. Brown (Arch)	E. B. Rogers (AgE)
F. A. Close (Econ)	J. R. Salley (Chem & Geol)
J. H. Couch (IE)	J. H. Steed (USA)
B. M. Cool (For & FacSen)	R. C. Turner (Phys)
C. C. Davis (IM)	J. V. Walters (Text)
R. C. Harshman (ChE)	J. B. Whitney (Biol)
M. R. Koldyke, Jr. (USAF)	Phillip M. Arsenault, Student Rep.
G. Labecki (Nurs)	Roger K. Abrams, Student Rep.
John LaGrone (Math)	

STANDING COMMITTEES OF THE UNIVERSITY 1971-72 (continued)15. Special Advisory Committee for Disposal of Poisonous Chemicals

N. R. Page (AgChem, Chairman)

Henry Polk (Chem)

James C. Carey (PhysPlant, ex-officio)

J. J. Porter (Textile Chemistry)

Raymond R. Kimmett, Student Representative

16. Special Advisory Committee on Use of Radioactive MaterialsR. W. Henningson (Chairman, ex-officio)

Henry R. Bungay (InterdisStudies) 1972

W. E. Berry (Safety, ex-officio)

W. K. Willard (Zool) 1973

Donald E. Turk (PoulSci) 1974

17. Traffic and Parking Committee

E. H. McCarter (Chairman)

E. J. Clark (CE & FacSen) 1972

F. Wayne Tower (Master Planner)

Rose Godbout (Nurs) 1973

David C. Prince, Student Rep.

John C. Newton (StuAffairs)

Francis M. Young, Jr., Student Rep.

Jack W. Weeden (Security)

Enrollment, 1962-1971

Clemson University Summer Sessions

Main Campus

<u>Summer Sessions</u>	<u>First</u>	<u>Second</u>	<u>Total</u>
1962	1386	914	2300
1963	1347	1007	2354
1964	1533	1202	2735
1965	1833	1383	3216
1966	1803	1736	3539
1967	1974	2006	3980
1968	2435	2385	4820
1969	2371	2101	4472
1970	2319	2109	4428
1971	2400	2292	4692

Greenville CampusSumter Campus

1967	189	1967	94
1968	139	1968	107
1969	118	1969	100
1970	146	1970	60
1971	112	1971	85

Off-Campus CoursesTotal for Main Campus, Greenville Campus,
Sumter Campus, and Off-Campus

1969	183	1967	4263
1970	424	1968	5066
1971	536	1969	4873
		1970	5058
		1971	5425

Enrollment of New StudentsEnrollment of Graduate Students

<u>Summer Sessions</u>	<u>First</u>	<u>Second</u>	<u>Total</u>	<u>First</u>	<u>Second</u>	<u>Total</u>
1962	108	43	151	186	56	242
1963	104	46	150	144	85	229
1964	170	110	280	267	150	417
1965	217	201	418	298	188	486
1966	73	285	358	324	372	696
1967	21	274	295	342	628	970
1968	36	256	292	500	778	1278
1969	34	213	247	516	621	1137
1970	94	325	419	633	719	1352
1971	90	338	428	841	851	1692

FACULTY RESEARCH COMMITTEE GRANT APPLICATIONS

Proposals for Faculty Research Committee grants should be in the Office of University Research, 17 Tillman Hall not later than November 1, 1971. Application forms may be secured in the Office of University Research. Only proposals using the Faculty Research Committee application form will be considered by the Committee.

The Committee makes awards to new faculty members initiating research, to faculty members initiating research in a new area, and in areas where other sources of support are inadequate or nonexistent.

GRADUATE COUNCIL MINUTES, SEPTEMBER 10, 1971

The Graduate Council met in Tillman Hall, Room 21 on September 10, 1971 at 3:00 p.m. Members present were: Dean A. E. Schwartz, Dr. C. W. Bolen, Mr. James Bostick, Dr. N. D. Camper, Dr. C. R. Freeze, Dr. H. W. Graben, Professor G. C. Means, Mr. Paul Mims, Dr. C. R. Smith, and Dr. J. S. Wolf.

The minutes of the July meeting of the Graduate Council were approved as distributed. Dean Schwartz introduced to the faculty representatives Mr. James Bostic and Mr. Paul Mims who are the newly appointed graduate student representatives on the Council. Dean Schwartz then summarized the purpose of the Graduate Council and the present status of actions taken by the Council. He noted that the following new programs are being implemented: Ph.D. in Textile and Polymer Science (January 1972), M.S. and Ph.D. in Systems Engineering (January 1972), M.Ed. in Elementary Education (July 1972), Master of Agriculture in Agriculture Mechanization (August 1971).

Dean Schwartz announced that the deadlines for submitting requests for new graduate courses and changes in existing courses are: October 1, 1971 for courses to be taught in the 1971-72 spring semester and December 15, 1971 for courses to be taught in the 1972-73 fall semester. He also requested that Council members remind their academic deans of the schedule for submission of proposals for new programs to be initiated in 1973-74.

Dean Schwartz said that the following information and copies of new forms would be mailed to the Council members: Faculty Senate proposal regarding the function and composition of the Graduate Council; new forms for Request of Approval of New Undergraduate/Graduate Courses; new forms for Application to Graduate School; sample computer printout of graduate school applicant's information.

Dean Schwartz requested that each member submit within ten days his approval or disapproval of the drafted statement issued by the Council of Graduate Schools regarding "The Doctor of Arts Degree."

GRADUATE COUNCIL MINUTES, SEPTEMBER 10, 1971 (Continued)

The following new graduate courses were approved:

CRP 853	Introduction to Planning Studio (Replacing CRP 653)
CRP 854	Planning Studio II (Replacing CRP 654)
CRP 863	Planning Studio III (Changing from 5 credits to 3)
CRP 864	Planning Thesis (Changing from 9 credits to 6)
Math 628	Numerical Linear Algebra
Engl 881	Directed Reading
Ag. Mech. 712	Farm Machinery Management
Ag. Mech. 733	Analysis of Agristructures
Ag. Mech. 781	Special Topics in Agricultural Mechanization
Nutrition 651	Human Nutrition
E&CE 629	Computer Organization
E&CE 652	Programming Systems
E&CE 816	Linear Integrated Circuits
E&CE 853	Computer Data Displays
E&CE 854	Advanced Simulation Studies
ESE 601	Environmental Engineering
ESE 602	Water and Waste Treatment Systems
ESE 603	Water and Waste Transport Systems
ME 845	Acoustics
WRE 650	Water Resources Engineering

The meeting adjourned at 5:00 p.m.

GRANT INFORMATION AVAILABLE IN OFFICE OF UNIVERSITY RESEARCH

Grant information in the Office of University Research, 17 Tillman Hall. Extension 3195. Sources of grant information available include: The Appleton-Century Guide to Federal Assistance for Education; The Catalog of Federal Domestic Assistance; The Taft Information System (Foundations); The Annual Register of Grant Support; The Grants Register; Guide to National Science Foundation Programs; Private Foundations Active in the Arts; Sources of Information on Funds for Education; A Guide to Federal Funds for Urban Programs at Colleges and Universities; Educational Service and Training Programs: A Guide to Federal Support; Sundry announcements of specific programs issued by all major federal agencies. These sources of grant information are maintained for use by faculty and staff members at their convenience.

FLU VACCINE CLINIC

Annual flu vaccine for faculty, staff and their families will be given on Tuesday, October 5, 1971 from 4:30 - 6:00 p.m. and Tuesday, November 16 from 4:30 - 6:00 p.m. in Room 101, Kinard Lab of Physics. The cost will be \$2 for each shot.

For those having taken shots within the past three years, a single booster is recommended. All others interested should take the two-shot series.

CHEMICAL ENGINEERING

D. F. Bruley (Prof) served as chairman with W. Moll of Hanover, Germany of Session I: Models: Intercapillary Oxygen Transport, at Workshop on Oxygen Transport in Tissue, Dortmund, Germany, July 18-22. Dr. Bruley presented the following papers with H. I. Bicher, D. D. Reneau, and M. H. Knisely: "Modeling Cerebral Tissue Oxygenation," "On-Line Computer Simulation of Oxygen Response in Brain During Anoxic-Anoxia," "Regulatory Mechanisms of Brain Oxygen Supply."

D. F. Bruley, paper presentation with D. D. Reneau, H. I. Bicher, and M. H. Knisely at XXV International Congress of Physiological Sciences, Munich, Germany, July 25-31, "Changes in Brain Tissue Oxygenation During Acute Hypoglycemia as Determined with Oxygen Ultra Micro-Electrodes and On-Line Computer Simulation."

D. F. Bruley, paper presentation with D. D. Reneau, H. I. Bicher and M. H. Knisely at AIChE meeting, Atlantic City, N.J. in Aug., "Glucose Diffusion and Consumption in the Human Brain."

D. F. Bruley acted as chairman of the "Physiological Control Systems" session at the 162nd National ACS meeting, Washington, D.C., Sept. 12-17. Dr. Bruley presented the following paper with H. I. Bicher, M. H. Knisely, and D. D. Reneau, "Studies of Cerebral Tissue Oxygenation and Related Autoregulation."

F. C. Alley (Prof) has been appointed to two committees of the State Board of Health, State Environmental Health Task Force and Committee on Occupational Health Standards.

CIVIL ENGINEERING

The John Ford Memorial Fund has been established. Any person, organization, or company wishing to contribute to this Fund should contact Dr. Herbert W. Busching (Head). The Fund will be used for an annual award to be given on Honors and Awards Day to a civil engineering student who shows an exceptional scholastic performance.

COLLEGE OF ENGINEERING

L. G. Rich (Dean) met in Columbia on Aug. 25, Sept. 2 and 8 as a member of the Committee on Plants or Facilities for Recovery of Nuclear Fuel and the Storage of Waste Nuclear Material appointed by the Governor.

L. G. Rich (Dean) was a member of a review team for the Environmental Protection Agency which visited the University of Wisconsin in Madison to review their programs in environmental engineering, Sept. 12-15.

COLLEGE OF INDUSTRIAL MANAGEMENT AND TEXTILE SCIENCE

William C. Laffoday (Dir of Professional Dev) had an address, "Marketing is Listening, Thinking, and then Speaking," published in a recent issue of Modern Textiles magazine.

COUNSELING CENTER

Dr. Virginia S. Hardie (Dir) is a member of the Task Force of PLEA (Piedmont Life Enrichment for the Aging) one of nine area-wide model projects for the aging operated in the United States. This project is funded by a grant from the U.S. Administration on Aging to the South Carolina Commission on Aging for the six Appalachian Counties of Greenville, Spartanburg, Anderson, Oconee, Pickens, and Cherokee.

Dr. Hardie is a member of the advisory board and the executive committee of the Home Health Services of Anderson and Oconee Counties.

Dr. Hardie recently appeared on "Today in the Piedmont," WFBC television program, in a series of programs stressing mental health professions.

ECONOMICS

F. H. Rueter (Asst Prof) and O. A. Davis, School of Urban and Public Affairs, Carnegie-Mellon University, presented a paper entitled, "A Simulation of Municipal Zoning Decisions" at the research seminar on the Mathematical Theory of Collective Decisions at Harbour Town, Hilton Head Island, Aug. 8-14.

ENVIRONMENTAL SYSTEMS ENGINEERING

J. M. Glennon, Jr. (Sanitary Engineer) has been appointed by the Governor to the State Board of Certification of Public Water and Wastewater Treatment Plant Operators, replacing J. H. Austin. Mr. Glennon, who is very active in State Operator Training programs also serves as chairman of the Certification Examination Committee and directs Clemson's twice-yearly Operator Short Schools.

ENVIRONMENTAL SYSTEMS ENGINEERING (Continued)

J. H. Austin (Prof) has been appointed chairman of South Carolina's new Environmental Health Task Force, a 40-member team established by the South Carolina Board of Health. The board will conduct a one-year extensive study of the state's environmental health problems and needs. A. R. Abernathy (Assoc Prof) was also appointed to serve with Dr. Austin on the task force.

T. M. Keinath (Asst Prof) presented a paper entitled "Physical-Chemical Waste Treatment" at the 40th annual conference of the Georgia Water Pollution Control Association held in Augusta on Sept. 13.

J. F. Andrews (Prof and Hd), at the invitation of Congressman William Jennings Bryan Dorn, presented testimony before the U.S. House of Representatives Public Works Committee on "The Need for Improved Operation and Maintenance of Wastewater Treatment Plants" on Sept. 15.

J. F. Andrews (Prof and Hd) served as vice-chairman of a workshop on Design-Operation Interactions for Large Wastewater Treatment Plants, Vienna, Austria, Sept. 20-24. He also served as chairman for two sessions of the workshop and presented two papers on "Design-Operation Interactions" and "Control Systems for Wastewater Treatment Plants." The workshop was sponsored by the International Association for Water Pollution Research.

"Who is Responsible for Clean Water?" This was the theme of an environmental control workshop for twenty-five municipal and county officials held on Sept. 16 in Sumter. The workshop was sponsored by the Environmental Systems Engineering Dept. as part of a grant under Title I of the Higher Education Act of 1965 and the Public Services Career Program of the Environmental Protection Agency. J. M. Glennon, Jr. and J. H. Austin assisted with the workshop.

FOOD SCIENCE

D. M. Henricks (Assoc Prof), D. R. Lamond (Univ. of Calif, Davis), J. R. Hill (Prof) and J. F. Dickey (Assoc Prof) have a paper "Plasma Progesterone Concentrations Before Mating and in Early Pregnancy in the Beef Heifer" in the Journal of Animal Science, 33:450-454.

D. M. Henricks and D. J. Tindall have a paper "Metabolism of Progesterone-4-¹⁴C in Porcine Uterine Endometrium" in the Sept. issue of Endocrinology.

A paper entitled "Brown Rot and Pectin Methyl Esterase Activity in Fresh Peaches" by V. A. Paynter and J. J. Jen (Asst Prof) has been published as Dept. of Food Science Research Series No. 19.

J. J. Jen presented a paper entitled "The Changes of Pectic Substances and Pectinesterase in the Ripening of Tomatoes" at the 162nd National Meeting of the American Chemical Society, Washington, D.C., Sept. 15.

INDUSTRIAL MANAGEMENT

C. O. Shuler (Assoc Prof) has been elected to the Board of Directors of the Carolinas Hospital and Health Services, Inc. of Charlotte.

Bettye B. Johnson (Instr) has been selected to "Personalities of the South - 1971."

J. A. Turner, Jr. (Asst Prof) was elected to the Executive Committee of the S.C. Association of Certified Public Accountants at its annual meeting. He was also given responsibility for the Professional Dev. Committee, Scholarship Committee and the Cooperation with Bankers and Attorneys Committee.

E. A. LaRoche (Assoc Prof) received the Ph.D. degree from the University of South Carolina on Aug. 27.

MATHEMATICAL SCIENCES

D. R. LaTorre (Assoc Prof) authored a paper entitled "Modular Congruences and the Brown-McCoy Radical for Semigroups," published in the Proceedings of the American Mathematical Society 29 (1971), 427-434.

K. T. Wallenius (Assoc Prof) has been elected to a third term as Visiting Lecturer in Statistics. The program is jointly sponsored by the American Statistical Association, the Institute of Mathematical Statistics and the Biometric Society and is funded by the National Science Foundation.

MECHANICAL ENGINEERING

C. S. Rudisill (Assoc Prof) and K. G. Bhatia (Res Asst) have published a paper entitled "Optimization of Complex Structures to Satisfy Flutter Requirements," in the American Institute of Aeronautics and Astronautics Journal, Vol. 9, No. 8, pp. 1487-1491.

D. W. Bradbury (Alumni Prof) participated in a two-week Advanced Training Workshop in Mechanisms sponsored by the National Science Foundation held July 24 - Aug. 7 at Oklahoma State University.

A. C. Elrod (Assoc Prof) and E. F. Coxé (Assoc Prof) co-authored a paper entitled "The Prediction of Temperature Profiles in Arbitrarily Shaped Cooling Lakes by Finite Difference Techniques." The paper was presented by Dr. Coxé at the 1971 Intersociety Energy Conversion Engineering Conference in Boston on Aug. 5.

E. Harrison (Prof) was installed as chairman of the executive committee of the Automatic Control Division of ASME on Aug. 9 at a meeting held during the Joint Automatic Control Conference, Washington University, St. Louis, Mo.

C. A. Brandon (Assoc Prof) presented a paper "Test of Similarity Variable for Dilute Fluid-Solid Heat Transfer" at the International Symposium on Two-Phase Systems in Haifa, Israel Aug. 29 to Sept. 2.

NURSING

Additional new faculty and staff, 1971-72:

Kelley, Carolyn Joyce, Instructor, B.S.N., Medical College of Georgia;
M.N., University of Florida.

POULTRY SCIENCE

Su-Ming Hou (Grad Asst) presented a paper at the Poultry Science Association annual meeting held in Fayetteville, Ark., Aug. 16-19. The paper, entitled "The Audibility Curve of the Chicken" was co-authored by M. A. Boone (Prof).

J. E. Jones (Asst Prof) also presented a paper entitled "Effect of Environment on Turkey Semen Production and Quality." This paper was co-authored by J. B. Cooper (Assoc Prof), M. A. Boone, and B. D. Barnett (Prof and Hd).

W. T. Derieux presented two papers at the annual meeting, "The Effect of Clopidol at the 0.25% Level on Reproductive Performance of Turkey Breeders and on Parasitemia in a Leucocytozoon Smithi Endemic Area -- A Progress Report" was co-authored by W. F. Scott of Nicholas Turkey Breeder Farms. "Immune Response of Turkeys to an Attenuated Fowl Cholera Vaccine in the Drinking Water" was co-authored by B. W. Bierer.

B. D. Barnett moderated a panel "The Pros and Cons of Accreditation. Is This the Answer for Strengthening Poultry Science Curricula?" at the annual meeting of the Poultry Science Association. He also chaired a nutrition session on evaluation of feed ingredients. He was elected to a three-year term as a director of the association and was named as chairman elect of the general program committee.

K. A. Holleman (Prin Ext Spec) presented a paper entitled, "A Multi-Agency Cooperative Effort to Educate Poultrymen in Pollution and Fly Control" by K. A. Holleman, J. F. Welter, W. S. Walker, J. B. Kissam and L. E. Priester, Jr.

RECREATION AND PARK ADMINISTRATION

Jack Stevenson (Assoc Prof) has recently been certified as a Laboratory Trainer by the Association of Religion and Applied Behavioral Sciences. This certification indicates approval of his leadership in Human Relations Laboratories, Interpersonal Communications Labs, and other laboratory events concerned with helping persons and organizations learn, grow and change.

TEXTILE DEPARTMENT

D. W. Lyons (Assoc Prof) served as a member of the Hearing Examination Panel holding public hearing on Environmental Noise Control in Atlanta, July 8-9.

TEXTILE DEPARTMENT (Continued)

D. W. Lyons and C. T. Vollers (Doctoral Candidate in Mech Eng) authored a paper entitled, "The Drying of Fibrous Materials," published in the Textile Research Journal.

D. W. Lyons has been appointed by the State Commissioner of Labor to serve on the Occupational Safety and Health Advisory Council for the State of South Carolina.

Dr. E.A. Vaughn (Asst Prof) in cooperation with T.W. Burton (Equip Mgr Athl Dept) has written a report on "An Evaluation of the Effect of Two Controlled Laundering Procedures on the Dimensional Stability, Serviceability, and Appearance of Three Types of Game Pants Considered for Use in Intercollegiate Football Competition."

The general objective of the study was to select football pants best suited for use by Clemson football teams in intercollegiate competition. It was determined that the criteria upon which to judge suitability would include dimensional stability, comfort, appearance retention, wear, and maintenance requirements.

R. H. Barker (Assoc Prof) visited several European countries during the summer, Holland, England, Germany and Switzerland. He lectured and attended research conferences in a program sponsored by Akzona Corp. (American Enka). Lectures on "Mechanistic Aspects of Cellulose Flammability" were presented at Basil, Switzerland and Oburnburg, Germany.

ZOOLOGY

S. A. Gauthreaux (Asst Prof) attended the 86th Annual Meeting of the American Ornithologists' Union at Seattle, Wash. from Aug. 28 to Sept. 4, and presented a paper entitled "The Influence of Fronts and Atmospheric Waves on Migrating Birds."

S. A. Gauthreaux recently authored a paper, "Methods of Studying Migrations" for a British magazine Birds of the World.

ADMINISTRATIVE REORGANIZATION OF THE COLLEGE OF ARCHITECTURE

Dean H. E. McClure has announced the appointment of four new department heads and an assistant to the Dean to administer academic areas of the College of Architecture, occasioned by growth and development in architecture and planning and great expansion in graduate enrollment.

Gayland Brooks Witherspoon, AIA, presently Assistant Head of the Department of Architecture of the University of Arkansas, will assume the position of Associate Professor and Head of the Dept. of Architectural Studies, Dec. 1, 1971.

ADMINISTRATIVE REORGANIZATION OF THE COLLEGE OF ARCHITECTURE (Continued)

During the interim until Professor Witherspoon's arrival, Professor Peter Lee of the Architectural Faculty has been appointed Acting Head of the Dept. Gayland Witherspoon has been active in architectural and consultant professional practice concurrent with teaching at the University of Arkansas. He attended architectural schools at the University of Arkansas and Washington University in St. Louis receiving the Master of Architecture Degree from the University of Illinois in 1962. He was a regular officer in the United States Air Force from 1956 to 1965 serving in a number of stateside as well as foreign assignments. He received the Air Force commendation medal for contributions of distinction in architectural design. Active in his own architectural practice in Arkansas, he is a corporate member of the American Institute of Architects. Professor Witherspoon is married to the former Fredonia Dees of Little Rock, and they have sons, ages 14 and 15.

Ralph Knowland, AIA, an Associate Professor of Architecture at Clemson, has been named Head of the Dept. of Building Science, commencing his duties July 1, 1971. A native of Canada, Professor Knowland was awarded the Bachelor of Architecture Degree by the University of Manitoba in Winnipeg in 1944. During an effective practice in architecture and building construction in his own firm, Knowland became increasingly involved in construction economics and returned to graduate school for advanced work in this area. Completing these studies at the University of Western Ontario in London, he was appointed to the Faculty of the College of Architecture at Clemson May 16, 1966. He is an associate member of the Royal Architectural Institute of Canada and a member of the South Carolina Chapter of the American Institute of Architects. He is married to the former Gale White of Winnipeg and has five children.

Thomas McPeak of the faculty of Kent State University was appointed Associate Professor and Head of the Dept. of History and Visual Studies of the College of Architecture, Clemson University on August 1, 1971 to replace Professor Robert Hunter, who asked to return to full-time teaching and creative endeavor. Professor McPeak studied at St. Benedict's College for one year and received his B.F.A. degree at Washburn University of Topeka in 1957. After a period of experience as art director of WIBW-TV in Topeka, and as art director in several public relations organizations, he returned to graduate study. He received the Master of Fine Arts Degree from the University of Kansas in Lawrence in 1965, specializing in design.

An Associate Professor of Fine Arts at Kent State University, McPeak was Head of the Dept. of Graphic Design. He was also chairman of the Visual Communications Coordinating Committee at Kent, and his painting and graphic design have been widely shown receiving awards at seven major exhibits. Thomas McPeak is married to the former Audra Lea Phelon of Topeka, Kansas and they have six children.

ADMINISTRATIVE REORGANIZATION OF THE COLLEGE OF ARCHITECTURE (Continued)

Professor Edward L. Falk, a member of the Dept. of Planning Studies, College of Architecture since 1968, has been appointed Acting Head of that department. Professor Falk is a native of Minneapolis, Minnesota, and received his B.A. degree as well as the M.A. degree from the University of Minnesota. Edward Falk enrolled in the graduate program in city and regional planning at the University of North Carolina at Chapel Hill, receiving the Master of Regional Planning degree from that institution in 1961. Mr. Falk served as a Research Fellow at the Center for Urban Studies in Chapel Hill, Senior Planner with the Wichita-Sedgwick County Planning Dept., Director of Advance Planning for the Memphis and Shelby County Planning Commission, and Director of the Spokane Metropolitan Area Transportation Study. A member of the American Institute of Planners, Professor Falk is married to the former Gail Martin of Minneapolis. They have two children.

James E. Dalton, an Assistant Professor in the College of Architecture, was appointed Assistant to the Dean of Architecture effective August 1, 1971. Professor Dalton, who will continue teaching architectural design while serving in this administrative role, received his first professional degree, Bachelor of Architecture, from Miami University of Ohio in 1964. He obtained the Master of Architecture Degree in Urban Design from the University of Minnesota and has worked for professional architectural firms in Ohio, Texas and South Carolina. Professor Dalton came to Clemson from the faculty of Texas Tech University and was active in college publications. He now is Faculty Editor of the SEMESTER REVIEW, a publication of the Clemson University College of Architecture, and is a partner of Associated Design Consultants, Architects of Clemson, and an associate member of the South Carolina Chapter of the American Institute of Architects. Mr. Dalton and his wife, the former Nancy Jo Millican, have one daughter.

CALENDAR OF CAMPUS EVENTS

Oct. 1-	Fri.-		Clemson Debaters - Middle Tennessee State University
Oct. 2	Sat.		Championship Debate Tournament; Murfreesboro, Tenn.
Oct. 2	Sat.	2:00 p.m.	Varsity Football - Clemson vs. Georgia Tech at Atlanta, Ga.
Oct. 2	Sat.		Cross Country - at Georgia Tech.
Oct. 2	Sat.	2:00 p.m.	Soccer - USC at Clemson.
Oct. 4	Mon.	2:00 p.m.	Freshman Football - Georgia at Clemson.
Oct. 4	Mon.		Cross Country - Furman.
Oct. 4	Mon.	7:00 p.m.	Foreign film, <u>All About Love (De l'amour)</u> (French), Daniel Hall Theatre - free.
Oct. 4	Mon.	8:30 p.m.	Anders J. Kaufmann (Assoc Prof) will speak on "Denmark, The Country and Its Building." Auditorium Lee Hall.

CALENDAR OF CAMPUS EVENTS Continued

Oct. 6	Wed.		Continuing Engineering Education - Operations Research - Seminar -- Riggs Hall.
Oct. 7	Thurs.	8:00 p.m.	Graduate wives' monthly meeting - YMCA.
Oct. 7- Oct. 9	Thurs.- Sat.		Little Theatre - Food Industries Theatre - "You Know I Can't Hear You When The Water Is Running."
Oct. 7	Thurs.	7:00 a.m.	Thursday Morning Quarterback Club - Harcombe Commons.
Oct. 8	Fri.	3:00 p.m.	Soccer - Maryland at College Park.
Oct. 8- Oct. 9	Fri. Sat.		Clemson Debaters - Stetson University Novice Debate Tournament; Deland, Fla.
Oct. 9	Sat.	2:00 p.m.	Varsity Football - Clemson vs. Duke at Norfolk, Va. (Oyster Bowl)
Oct. 9	Sat.		Cross Country - Duke and USC at Columbia.
Oct. 10	Sun.	2:00 p.m.	Soccer - Virginia at Charlottesville.
Oct. 11	Mon.	2:00 p.m.	Freshman Football - Georgia Tech at Clemson.
Oct. 11	Mon.		Cross Country - N.C. State.
Oct. 13	Wed.	10:00 a.m.	Industrial Management & Textile Science Seminar Series - R. Roy Pearce, Vice President, Consolidated Foods, Inc.; Columbia, S.C. -- Sirrine Hall Aud.
Oct. 13	Wed.		Continuing Engineering Education - seminar - Working With Digital Electronics, Riggs Hall.
Oct. 13	Wed.	3:30 p.m.	Food Science Seminar - Prof. L.O. Van Blaricom, Clemson University, will speak on "Discoloration of Canned Peaches." Room F-150, P&AS Bldg.
Oct. 14	Thurs.	7:00 a.m.	Thursday Morning Quarterback Club - Harcombe Commons.
Oct. 14	Thurs.	4:00 p.m.	Environmental Systems Engineering Seminar - Allen Hirsch, Director, Division Program Development of the Environmental Protection Agency in Washington, D.C. -- 302 Rhodes Research Center.
Oct. 14	Thurs.	4:00 p.m.	Nutrition-Physiology Seminar -- Dean R.H. Barnes, Graduate School of Nutrition, Cornell University, will speak on "Prenatal Protein Deprivation and Mental Development" -- Room A-101, P&AS Bldg.
Oct. 16	Sat.	1:30 p.m.	Varsity Football - Clemson vs. Virginia at Richmond, Va. (Tobacco Bowl)
Oct. 16	Sat.	2:00 p.m.	Soccer - Emory at Atlanta.
Oct. 16	Sat.		Cross Country - University of North Carolina.
Oct. 16	Sat.	6:30 p.m.	International Student Association Supper for Clemson community - Harcombe Commons.

PROCEDURES FOR SUBMITTING NEWSLETTER MATERIAL

All Calendar items of campus events (speakers, films, meetings, seminars, sporting events, etc.) should be submitted by written memorandum directly to the Office of Public Relations, Trustee House. Information and news items from the Office of the President, Vice President for Business and Finance, Vice President for Executive Affairs, Vice President for Student Affairs and the Vice President for Development should be submitted by written memorandum to the Office of Public Relations, Trustee House. Information and news items from all areas under the Vice President for Academic Affairs should be submitted by written memorandum to Dr. Claud B. Green, Room 28, Tillman Hall.

The following deadlines prevail: Items to appear in the Newsletter published the 1st of each month must be submitted by the 20th of the previous month; items to appear in the Newsletter published the 15th of each month must be submitted by the 5th of each month.

CLEMSON NEWSLETTER

INFORMATION FOR THE STAFF OF CLEMSON UNIVERSITY

Vol. 11 No. 5

October 15, 1971

COLISEUM SEATING ARRANGEMENT ANNOUNCED BY ATHLETIC DEPARTMENT

In an effort to have all University students seated directly behind the Clemson bench on the east side of Littlejohn Coliseum, it will be necessary to relocate 268 faculty and employee season ticket holders for the 1971-72 basketball season and all subsequent seasons.

Those individuals who were assigned seats in Section E odd, and Section F odd and even, will be relocated to other positions outside the student area. (Continued on page 12.)



UNIVERSITY COED WINS FIRST SCHOLARSHIP -- Miss Beverly Rae Bozard accepts the first scholarship check for a major new scholarship program established by the S.C. Law Enforcement Officers' Association. Capt. Billy Fallaw, chairman of the Association's Youth Committee which selects the winners, presents the award while President Robert C. Edwards and Dr. Geraldine Labecki, dean of the School of Nursing, look on. Miss Bozard, a freshman in nursing, won the four-year award in competition with 30 initial applicants from high schools throughout the state. She will receive a total of \$4,000 over the next four academic years.

Members of the Visiting Committee for the Institutional Self-Study
Clemson University
October 31 - November 3, 1971

<u>Name</u>	<u>Standard and Area Assignments</u>
Dr. J. Paul Reynolds, Chairman Vice Chancellor for Academic Affairs University of North Carolina at Wilmington Wilmington, North Carolina 28403	Purpose
President T. Marshall Hahn, Jr. Virginia Polytechnic Institute Blacksburg, Virginia 24061	Organization and Administration
Dr. Robert Bryan Associate Vice President for Academic Affairs University of Florida Gainesville, Florida 32601	Educational Program College of Liberal Arts
Dr. James M. Smith Director, Graduate Institute of Liberal Arts Emory University Atlanta, Georgia 30322	Educational Program College of Liberal Arts
Dr. John A. Hague Director, Department of American Studies Stetson University DeLand, Florida 32720	Educational Program College of Liberal Arts
Dr. Arthur Doerr Vice President for Academic Affairs University of West Florida Pensacola, Florida 32504	Educational Program College of Liberal Arts
Dr. John C. Calhoun Vice President for Academic Affairs Texas A & M University College Station, Texas 77843	Educational Program College of Physical, Mathematical, and Biological Sciences
Dean James E. Foy Dean of Student Affairs Auburn University Auburn, Alabama 36830	Student Personnel
Mr. Jack C. Guistwhite Director, Inter-Institutional Relations Florida Atlantic University Boca Raton, Florida 33432	Educational Program

<u>Name</u>	<u>Standard and Area Assignments</u>
Dr. Jerrold Orne University Librarian University of North Carolina Chapel Hill, North Carolina 27514	Library
Mr. George J. Ruschell Assistant Vice President for Business University of Kentucky Lexington, Kentucky 40506	Financial Resources Physical Plant
Dr. Robert D. Kersten Dean, College of Engineering Florida Technological University Orlando, Florida 32816	Educational Program College of Engineering
Dr. Charles P. Graves Dean, College of Architecture University of Kentucky Lexington, Kentucky 40506	Educational Program College of Architecture
Dr. Roy M. Hall Dean, School of Education Georgia State University Atlanta, Georgia 30303	Educational Program College of Education
Dr. Pearlle C. Dove Chairman, Department of Education Clark College Atlanta, Georgia 30314	Educational Program College of Education
Dr. Robert L. Rouse Chairman, Department of Economics Texas Tech University P. O. Box 4229 Lubbock, Texas 79409	Educational Program College of Industrial Management and Textile Science
Dr. A. H. Keally Professor and Head, Department of Industrial and Personnel Management University of Tennessee Knoxville, Tennessee 37916	Educational Program College of Industrial Management and Textile Science
Dr. D. W. Chaney Dean, School of Textiles North Carolina State University Raleigh, North Carolina 27607	Educational Program College of Industrial Management and Textile Science

October 15, 1971

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Name

Standard and Area Assignments

Dr. James R. Oliver
Dean, Graduate School
University of Southwestern Louisiana
Lafayette, Louisiana 70501

Graduate Program
Research

Dr. G. L. Smith
Assistant to the President for Development
Prairie View A & M College
Prairie View, Texas 77445

Educational Program
College of Agricultural Sciences

Dr. J. Y. Terry
Head, Vocational Agriculture Education
Louisiana Tech University
Ruston, Louisiana 71270

Educational Program
College of Agricultural Sciences

Dr. George Hyatt, Jr.
Director, Agricultural Extension Service
North Carolina State University
Raleigh, North Carolina 27607

Educational Program
College of Agricultural Sciences

Dr. Herman D. Phelps
Associate Dean, Division of Continuing
Education
East Carolina University
Greenville, North Carolina 27834

Special Activities
Clemson University at Greenville

Dr. Mary Lohr
Dean, School of Nursing
University of Virginia
Charlottesville, Virginia 22903

Educational Program
School of Nursing

Dr. Leslie M. Reid
Head, Recreation and Parks
Texas A & M University
College Station, Texas 77843

Educational Program
College of Forest and Recreation
Resources

Dr. William H. Fletcher
Department of Chemistry
University of Tennessee
Knoxville, Tennessee 37916

Department of Chemistry
Representing the American Chemical
Society

<u>Name</u>	<u>Standard and Area Assignments</u>
Dr. John F. Hosner, Director Division of Forestry and Wildlife Sciences Virginia Polytechnic Institute Blacksburg, Virginia 24060	Department of Forestry Representing the Society of American Foresters
Professor J. W. Barrett, Head Department of Forestry The University of Tennessee P. O. Box 1071 Knoxville, Tennessee 37901	Department of Forestry Representing the Society of American Foresters
Mr. Donald R. Theoe Director Professional Programs Society of American Foresters 1010 Sixteenth Street, N.W. Washington, D. C. 20036	Department of Forestry Representing the Society of American Foresters

STUDENT RELATIONS COMMITTEE

President Edwards has recently appointed a Student Relations Committee consisting of:

Mr. John D. Marshall, Vice President of the Student Body
Miss Susan Delony, Assistant Dean of Students
Dr. Gordon W. Gray, College of Education
Miss Deborah Jean Skinner
Mr. Vernon Hodges, Vice President of the Faculty Senate, Chairman

which met for the first time on Wednesday, September 15, 1971.

The Committee's function is to hear grievances by students against faculty members and attempt to resolve those grievances. The committee will meet each Wednesday in the Student Government Board room at 8:00 p.m. unless there are no complaints pending. Please inform your classes that requests for a hearing may be presented to the Chairman or to any member of the Committee.

ATHLETIC COUNCIL

The membership of the Athletic Council as listed on page 5 of the Oct. 1, 1971 Newsletter was incomplete and should read as follows:

K. N. Vickery (Chairman)

Corinne Sawyer (FacSen)	1972	T. C. Breazeale, Jr. (President of the Alumni Assn.)
T. D. Efland (IM&TS)	1972	
B. J. Prochaska (Math)	1972	George H. Aull, Jr. (Immediate Past President of the Alumni Assn.)
W. J. Lanham (AgEcon), Secretary	1973	T. C. Atkinson, Jr. (President of IPTAY)
R. W. Moorman (EM)	1973	Chris Suber (Immediate Past President of IPTAY)
J. V. Reel (SocSci)	1973	
J. L. Young (Arch)	1974	

MINUTES OF THE MEETING OF THE FACULTY SENATE, AUGUST 17, 1971

President Sawyer called the meeting to order at 4:15 p.m. The minutes of the meeting of July 13, 1971 were approved as circulated with the change in the last paragraph of "Article I of the By-Laws" to "Article II." President Sawyer extended a welcome back to Senators who had been away for the summer, and introduced Professor T. E. Skelton, who will fill the Senate seat vacated by Professor C. E. Rieck of the College of Agricultural Sciences.

President Sawyer reported that, on behalf of the Faculty Senate, she had participated in the orientation program for new faculty; she expressed her appreciation to Professors J. A. Hash and B. J. Skelton for serving as drivers and guides during orientation. President Sawyer also reported that she had attended a meeting of the Athletic Council.

Concerning the institutional self-study reports, word has come from Professor W. C. Godley, Chairman of the Steering Committee, that the individual college reports and university-wide standards are now available in the Library. Completed reports will be delivered to each collegiate Dean and will be readily available for reading by Senators.

Certain problems concerning reserved parking spaces on campus have been called to the attention of President Sawyer. The general complaint is that the number of reserved parking spaces is becoming too great and there is some question as to who should qualify for a reserved space. At the request of the Senate, the

MINUTES OF THE MEETING OF THE FACULTY SENATE, August 17, 1971 (Continued)

University Traffic and Parking Committee will be asked to look into the problem.

No report on the resolutions passed by the Senate concerning traffic control devices on campus was available: this will be given at the next regular meeting of the Faculty Senate.

With regard to the proposed faculty manual, President Sawyer informed the Senate that the manual should be back in the hands of the Senate for final approval by September. At the request of the Senate, Professor M. W. Jutras, the Senate's representative on the committee studying the proposed revisions, will be invited to attend the September meeting.

Professor J. W. Hubbard, Chairman of the Policy Committee, presented an informational item containing the following recommendations relating to Faculty Senate meetings:

1. That the Faculty Senate continue to meet regularly (at least once each month) during the summer;
2. That the quorum required for conducting Faculty Senate business be reduced to 18 members;
3. That the standing committees of the Faculty Senate be urged to become more active during the summer to avoid expending unnecessary time later getting acquainted and generating agenda.

Other concerns of the Policy Committee will be the general area of promotion policies, procedures for granting tenure, and procedures for selecting department heads and other administrators.

Professor J. C. Fanning reported for the Welfare Committee. The committee has been looking into the possibility of obtaining faculty meal tickets, but obtaining such tickets does not now appear to be feasible. Other items under consideration are the use of university medical facilities by the faculty; the present retirement system; and possible formulation of a third option for salary payments to nine-month personnel. There are currently two options for receiving salary payments open to nine-month personnel, one based on eight-full month and two half-month payments, and one based on extension of total salary over a period of twelve months. Certain statements made by Senators indicated that these options for payment are not well understood among the faculty. It was pointed out that an effort was made to explain the options to new faculty during orientation. Also, the committee has inquired as to why certain summer salary payments such as from grants are made on the tenth of the month rather than on the first. It appears that computer processing operations make this necessary, but it is hoped that new computer facilities will allow payment to be made earlier in the month in the future.

MINUTES OF THE MEETING OF THE FACULTY SENATE, August 17, 1971 (Continued)

There were no reports from the Admissions and Scholarship Committee, from the Research Committee or from Ad Hoc Committee A.

Concerning the recommendation by the Policy Committee relating to the quorum required for conducting Faculty Senate business, it was pointed out by Professor D. R. Latorre that to make this change would require amending the By-Laws of the Faculty and Faculty Senate. Professor J. C. Mullins suggested that the wording of the recommendation be changed to call for attendance of a simple majority at meetings rather than 18 or a 2/3 majority as the requirement now reads. There was some question as to whether or not 18 members would be an adequate number for major Senate decisions. This recommendation was passed back to the Policy Committee who will consider the possible formulation of an amendment calling for a simple majority as a quorum for conducting Senate business.

The meeting was adjourned at 4:50 p.m.

Absentees from the meeting were: V. S. Hodges, W. E. Castro, W. F. Beckwith, and J. D. Fulton.

GRANT INFORMATION AVAILABLE IN THE OFFICE OF UNIVERSITY RESEARCH

Grant Information Available in the Office of University Research, 17 Tillman Hall, Extension 3195. Sources of grant information available include: The Appleton-Century Guide to Federal Assistance for Education; the Catalog of Federal Domestic Assistance; the Taft Information System (Foundations); The Annual Register of Grant Support; the Grants Register; Guide to National Science Foundation Programs; Private Foundations Active in the Arts; Sources of Information on Funds for Education; A Guide to Federal Funds for Urban Programs at Colleges and Universities; Educational Service and Training Programs: A Guide to Federal Support; Sundry announcements of specific programs issued by all major federal agencies. These sources of grant information are maintained for use by faculty and staff members at their convenience.

COLLEGE OF ARCHITECTURE

Sam Wang (Assoc Prof) is a participant in a two-man exhibition of photo-serigraphy in the M.I.T. Art Gallery during October.

Jerry Clement (Asst Prof) attended the 3rd Annual Graduate & Professional Search at the University of Maryland, College Park, Md., on Oct. 11 to discuss the recently expanded graduate offerings in Architecture, City & Regional Planning and Fine Arts.

COLLEGE OF ARCHITECTURE (Continued)

Ireland Regnier (Assoc Prof on leave) employed by the Greater London Council as an Art Consultant, for the academic year 1971-72 has been commissioned to design and paint three murals for a university complex now under construction.

MINUTES OF MEETING OF UNIVERSITY LIBRARY COMMITTEE, SEPT. 7, 1971

Present: Dean C. B. Green, D. R. Latorre, Chairman, 1970-71, R. J. Calhoun, Ralph Knowland, R. E. Shoenike, J. M. Wannamaker, W. E. Bachop, Elizabeth B. Galloway, D. B. Stafford, J. W. G. Gourlay.

D. R. Latorre, Chairman 1970-71, spoke of the responsibilities of the Committee, the work accomplished in 1970-71, and conducted the election of new officers.

M. W. Jutras was elected Chairman for 1971-72, and J. W. Gordon Gourlay, Secretary.

After discussion it was the consensus that the first Tuesday of the month should be retained as the most convenient time of meeting, that the meeting should begin at 3:30.

Dean C. B. Green commented on the importance of the work of the Library Committee, and then made comparisons between the Self-Study of the Library in 1961 and that of 1971. He noted that certain recommendations made in the Self-Study report could form the basis for discussion and action of the University Library Committee in 1971-72.

Mr. Gourlay outlined the report that he would make to the Education Committee of the Governor's Management Review Commission, Sept. 8, 1971.

Time of next meeting: Tuesday, October 5, 1971, at 3:30 p.m.

ECONOMICS

Joseph A. Ziegler (Asst Prof) received his Ph.D. degree in Economics from the University of Notre Dame on August 6, 1971.

ELEMENTARY AND SECONDARY EDUCATION

M. A. King (Prof and Head) has been appointed a member of the Advisory Panel of the Southern Regional Office of the College Entrance Examination Board. There are 12 members who are appointed for three-year terms.

ENTOMOLOGY AND ECONOMIC ZOOLOGY

T. R. Adkins, Jr. (Prof) attended and participated (Chairman) in the meetings of the committee on Professional Training, Standards, and Status for the Entomological Society of America in College Park, Md., Sept. 1-4. He also took part in conferences with USDA-CSRS officials in Beltsville, Md.

Richard F. Nash, Jr. (Asst Prof) presented a talk at the meetings of the Carolina's Golf Course Superintendents in Asheville, N.C. on Sept. 15 on "Turf Insects and Their Control."

ENVIRONMENTAL SYSTEMS ENGINEERING

B. C. Dysart III (Assoc Prof) was an invited participant at the "Energy and the Environment Conference" held Sept. 27-28 in Denver. The meeting was sponsored by the Electric Power Council on the Environment. Dr. Dysart made a presentation on environmental issues in South Carolina relating to the production of electric power.

HORTICULTURE

E. T. Sims, Jr. (Assoc Prof), C. E. Gambrell (Asst Prof), and J. T. McClary (former Grad Stu) published a paper in the latest issue of the Journal of the American Society for Horticultural Science entitled "The Influence of Succinic Acid-2, 2-dimethylhydrazide on Peach Quality."

H. J. Sefick (Assoc Prof) attended the Eastern Grape Breeders Conference at North Carolina State University, Sept. 9-10 and showed a film on mechanical harvesting of muscadine grapes and discussed the applicability of mechanical bunch grape harvesters to muscadine grapes.

H. J. Sefick had an article, "Scuppernong" in the Sept. issue of Sandlapper.

INTERDISCIPLINARY STUDIES

H. R. Bungay (Prof) presented a paper "Proportional Controls for Small Fermenters" at the National Meeting of the American Chemical Society, Washington, D.C. on Sept. 12-17. Dr. Bungay completed his term as Chairman, Division of Microbial Chemistry and Technology, American Chemical Society and was elected to the office of Councilor.

M. J. B. Paynter (Head and Assoc Prof, Microbiol) and H. R. Bungay have an article "The Effect of Microbial Interactions of the Performance of Waste Treatment Processes" in a Biotechnology and Bioengineering Symposium, Vol. 2, p. 51 (1971) Biological Waste Treatment.

MATHEMATICAL SCIENCES

Renu Laskar (Assoc Prof) participated in an international symposium on combinatorial mathematics and its applications held at the Colorado State University, Fort Collins, Colo., Sept. 9-11.

PHYSICS

Dr. Paul Adrien Maurice Dirac will be a guest speaker at Physics Colloquia on Nov. 3 at 3:00 p.m. In addition, he will give a talk on Nov. 2, tentatively at 8:00 p.m. under the sponsorship of Sigma Xi Society. Dr. Dirac was the recipient of a Nobel Prize in 1933 and many other honors for his brilliant and beautiful work on the foundations of quantum mechanics. His discovery of antimatter in nature dramatically illustrates the predictive power of physical principles. At present he is a distinguished professor at Florida State University, Tallahassee.

SOCIAL SCIENCES

James E. Sargent (Instr) has completed an oral history with Raymond Molen, former F. D. Roosevelt adviser and editor of Newsweek, for the Hoover Institution, Stanford University.

TEXTILE DEPARTMENT

J. L. Lundberg (Assoc Prof and Hd) presented an invited paper, "Molecular Clustering and Segregation in Systems of Polymers and Low Molecular Weight Compounds," at the 9th Prague IUPAC Microsymposium on Macromolecules." In addition, he presented a paper, "Thermodynamics of Interactions in Polymer Solutions," during Sept. 6-9, sponsored by the International Union of Pure and Applied Chemistry, the Czechoslovak Academy of Sciences, and the Czechoslovak Chemical Society.

Dr. Lundberg and I. R. Hardin (Ph.D., Clemson, 1971) contributed a paper, "Light Scattering by Fibers: Approximations from Geometric Optics," in the Symposium on the occasion of the Centennial of Rayleigh Scattering Theory, 162nd National Meeting of the American Chemical Society, Sept. 12-17, Washington, D.C.

E. S. Olson, (Assoc Prof) presented a paper entitled "Solvent Dyeing of Acrylic Fibers: Process Variables and Mechanisms Based on Rates of Dyeing and Diffusion Studies Using Cationic Dyes," to the American Chemical Society, Division of Organic Coatings and Plastics Chemistry, Sept. 15 in Washington, D.C.

TEXTILE DEPARTMENT (Continued)

C. W. Roberts (Assoc Prof) attended the meeting of the American Chemical Society in Washington, D.C., Sept. 11-17 and served as chairman of the Council Committee on Technician Activities, chairman of the Organic Coatings and Plastics Chemistry Division, and as a member of the Executive Committee on the Technician Curriculum Writing Project (NSF sponsored).

COLISEUM SEATING ARRANGEMENT Continued from Page 1

Any faculty member or employee involved who desires to be seated with someone with whom they are presently seated is asked to make a request in person or by written memorandum to the ticket office in Fike Field House.

CALENDAR OF CAMPUS EVENTS

Oct. 16	Sat.	1:30 p.m.	Varsity Football - Clemson vs. Virginia at Richmond, Va. (Tobacco Bowl).
Oct. 16	Sat.	2:00 p.m.	Soccer - Emory at Atlanta.
Oct. 16	Sat.		Cross Country - University of North Carolina.
Oct. 16	Sat.	6:30 p.m.	International Student Association Supper for Clemson community - Harcombe Commons.
Oct. 18	Mon.	7:00 p.m.	Foreign film, <u>A Summer to Remember</u> (Russian), Daniel Hall Theatre - free.
Oct. 18- Oct. 22	Mon.- Fri.		Continuing Engineering Education - Refractory Manufacturing Short Course, Olin Hall.
Oct. 18	Mon.	12:15 p.m.	Dept of Plant Pathology & Physiology Seminar, Effects of Herbicides on Multiple Organism Soil Systems - Dr. R. Rodriguez-Kabana, Auburn University -- 222 Long Hall.
Oct. 19	Tues.	3:00 p.m.	Soccer - Erskine at Due West.
Oct. 20	Wed.	11:15 a.m.	Agronomy - Dr. F.P. Achorn, Tennessee Valley Authority, Muscle Shoals, Ala.; Production, Marketing and Use of Solid Solution and Suspension Multinutrient Fertilizers I. Rm. A-203 P&AS Bldg.

CALENDAR OF CAMPUS EVENTS Continued

- Oct. 21 Thurs. 4:00 p.m. Environmental Systems Engineering Seminar-
Mr. John E. Hagan, Southeast Water Laboratory
Environmental Protection Agency, will speak
on "Pollution Control Systems Analysis,"
in 302 Rhodes Center.
- Oct. 21 Thurs. 11:15 a.m. Agronomy - Dr. F.P. Achorn, TVA, Muscle
Shoals, Alabama; Production, Marketing
and Use of Solid, Solution and Suspension
Multinutrient Fertilizers II - Rm. A-203
P&AS Bldg.
- Oct. 21 Thurs. 7:00 a.m. Thursday Morning Quarterback Club -
Harcombe Commons.
- Oct. 21 Thurs. 4:00 p.m. Chemistry Seminar - Prof. S.P. McManus,
Department of Chemistry, University of
Alabama in Huntsville (Organic) - Rm. 131
Brackett Hall.
- Oct. 21 Thurs. 4:00 p.m. Physics Colloquium - Dr. William Bebbington,
Savannah River Plant, Aiken, S.C., will speak
on "Radiation Waste Management and Storage."
- Oct. 22- Fri.-
Oct. 23 Sat. Mississippi State University, Forensics
Tournament, Starkville, Mississippi.
- Oct. 23 Sat. 1:30 p.m. Varsity Football - Clemson vs. Auburn
at Auburn, Ala.
- Oct. 23 Sat. 10:00 a.m. Soccer - UNC at Chapel Hill.
- Oct. 25 Mon. 2:00 p.m. Freshman Football - South Carolina at
Clemson.
- Oct. 25 Mon. Fort Hill Clemson Club Annual Business
Meeting - Election of officers.
- Oct. 25 Mon. 7:00 p.m. Foreign film, Viridiana (Spanish), Daniel
Hall Theatre - free.
- Oct. 25 Mon. Continuing Engineering Education - Seminar -
Interactive Computing for High School
Administrators, Riggs Hall.
- Oct. 25 Mon. 12:15 p.m. Dept. of Plant Pathology & Physiology
Seminar - Hormonal Changes During Disease,
Dr. N.D. Camper, Clemson University.
- Oct. 26 Tues. 3:00 p.m. Soccer - Duke at Clemson.
- Oct. 27 Wed. 3:30 p.m. Food Science-Microbiology Seminar - Dr. M.L.
Speck (Dept. of Food Science, North Carolina
State University, Raleigh) will speak on
"Relation of Microbial Injury to Food Pro-
tection and Manufacture." Rm. F-150,
P&AS Bldg., Food Science Dept.

CALENDAR OF CAMPUS EVENTS Continued

Oct. 28- Nov. 14	Thurs.- Sun.	Architectural Exhibit - "Still Life Today" - Lee Hall Gallery.
Oct. 28- Oct. 29	Thurs.- Fri.	4:00 p.m. Chemistry Seminar - Prof. P. von R. Schleyer, Dept. of Chemistry, Princeton University - DuPont Lecturer (Organic) - 131 Brackett Hall.
Oct. 28	Thurs.	7:00 a.m. The Thursday Morning Quarterback Club -- Harcombe Commons.
Oct. 28	Thurs.	4:00 p.m. Environmental Systems Engineering Seminar - Mr. Jesse M. Cohen, Cincinnati Water Labora- tory, Environmental Protection Agency, will speak on "Water Chemistry," in 302 Rhodes Center.
Oct. 29	Fri.	Alumni National Council and Clemson Foundation - meet at Clemson House.
Oct. 29	Fri.	Tigerama - Stadium.
Oct. 30	Sat.	1:30 p.m. Varsity Football - Clemson vs. Wake Forest (Homecoming).
Oct. 30	Sat.	10:30 a.m. Soccer - Western Carolina at Clemson.
Oct. 30	Sat.	Cross Country Regional Meet.
Oct. 30	Sat.	CDA Concert.
Oct. 31	Sun.	Halloween.

PROCEDURES FOR SUBMITTING NEWSLETTER MATERIAL

All Calendar items of campus events (speakers, films, meetings, seminars, sporting events, etc.) should be submitted by written memorandum directly to the Office of Public Relations, Trustee House. Information and news items from the Office of the President, Vice President for Business and Finance, Vice President for Executive Affairs, Vice President for Student Affairs and the Vice President for Development should be submitted by written memorandum to the Office of Public Relations, Trustee House. Information and news items from all areas under the Vice President for Academic Affairs should be submitted by written memorandum to Dr. Claud B. Green, Room 28, Tillman Hall.

The following deadlines prevail: Items to appear in the Newsletter published the 1st of each month must be submitted by the 20th of the previous month; items to appear in the Newsletter published the 15th of each month must be submitted by the 5th of each month.

CLEMSON

NEWSLETTER

INFORMATION FOR THE STAFF OF CLEMSON UNIVERSITY

OCT 29 1971

CLEMSON UNIVERSITY LIBRARY
SOUTH CAROLINA ROOM

Vol. 11 No. 6

November 1, 1971

PHASE I OF UNIVERSITY'S STUDENT UNION PROGRAM INITIATED

Construction on Phase I of the University's Student Union Program was launched Oct. 26 with ground-breaking ceremonies at Fike Recreation Center. Phase I, the student recreation-physical development-intramural portion of the union program, includes construction of an eight-lane, 75-ft.-long swimming pool with tartan deck, a diving pool, and renovation of the present large gymnasium which will have a tartan floor.

The \$2,921,494 construction contract (with Gillespie Construction Co. of Anderson) signed by the University, gives Clemson a six month option to include construction of 10 indoor handball courts should additional funds (\$192,381) become available.

The Fike Center renovation and additions also include new locker room facilities; activity rooms for gymnastics, fencing, dancing, wrestling, golf and boxing; areas for basketball, volleyball, badminton and related sports; a large terrace with doors opening onto the main pool; intramural program offices; and equipment storage rooms. Completion of Phase I is expected in early 1973.

ALUMNI CENTER BIDS ARE OPENED

Threatt-Maxwell Construction Company of Greenville submitted the apparent low bid of \$356,580 for construction of the University's new Alumni Center. Califf and Player, Columbia architectural firm, designed the one-story building which will have 12,000 square feet of floor space for conducting programs of the Alumni Association.

Preliminary work on the Alumni Center will begin following final acceptance of the bid by the Board of Trustees, the Alumni Association's National Council, and the State Budget and Control Board. The building will house an alumni lounge and office space, and will be financed entirely through special gifts from alumni. Completion of the project is expected by next summer.

PRESIDENT EDWARDS ANNOUNCES HOLIDAYS

President Robert C. Edwards has announced extra holidays for Thanksgiving and the Christmas season, 1971-72.

Thanksgiving will be observed this year on Nov. 25. A holiday will be observed on Friday, Dec. 24, in lieu of Christmas Day and another on Friday, (Continued on page 2.)

PRESIDENT EDWARDS ANNOUNCES HOLIDAYS Continued

Dec. 31, in lieu of New Year's Day. Five other workdays have also been designated as holidays for full-time non-teaching employees: Nov. 26, Dec. 20, 21, 22, and 23.

Full details are available in a memorandum issued to the Vice Presidents, Oct. 19, 1971.

YEARBOOK OFFERED TO NON-STUDENTS

TAPS, the University yearbook, is one of the finest college yearbooks in the nation. Eight of the last nine years the Associated Collegiate Press has rated TAPS All-American (its highest award) and four of the last five years TAPS has been named the top yearbook in the state by the South Carolina Collegiate Press Association.

Many faculty and staff members and graduate students have expressed a desire to purchase a TAPS in recent years. Regrettably, past TAPS staffs have neglected you as a group and have failed to administer to your situations. This year we are going to make every effort to improve this relationship. If you desire a 1972 TAPS please fill out the form at the bottom and mail it with a \$15 check to TAPS. The 1972 TAPS will be mailed to your home or office next April.

We also have a limited number of old TAPS in mint condition that will be sold on a first-come basis for \$15 also. These years -- 1938, 1939, 1954, 1955, 1956, 1961, 1963, 1964, 1968, 1969.

Name _____

Mail to _____

City _____ State _____ Zip _____

I have enclosed \$15.00 per copy for a _____ TAPS

DEADLINE FOR CHECKS --- November 15

MINUTES OF MEETING OF UNIVERSITY LIBRARY COMMITTEE, OCTOBER 5, 1971

Present: M. W. Jutras (Chairman), W. E. Bachop, R. J. Calhoun, Opal Hipps, Elizabeth Galloway, Ralph Knowland, David Rowe (Student Senate), R. E. Schoenike, D. B. Stafford, J. M. Wannamaker, Patrick Watts (Student Representative), H. H. Wilson, J. W. G. Gourlay (Secretary).

Minutes of the meeting of September 7 were approved.

Dr. Jutras stressed the importance of the library in the University and indicated that he had discussed with some administrative personnel the serious shortage of funds available for the purchase of books and the need for expanding the physical facilities of the library building.

Ad Hoc Committee to Investigate the Feasibility of Acquiring, Cataloging, and Storing Audio-visual Materials in the Main Library.

Ralph Knowland, Chairman, presented the attached report and recommendations. After discussion, the recommendations in the report were accepted by the University Library Committee.

Mr. Gourlay distributed for information and discussion:

- A. Standards for University Libraries - a paper by Dr. Robert B. Downs and Mr. John W. Hussman which appeared in College and Research Libraries - January, 1970, which presented for comparison, statistics of fifty of the largest research libraries in the United States and Canada, 1965-1968.
- B. Recommendations of the Self-Study Committee of the Library, Clemson University Self-Study Report, VI-91 - VI-95. Mr. Gourlay noted that some of the recommendations had already been implemented through funds approved in the 1971-72 budget but that his more serious concern was for sufficient funds to purchase the requests for books that were flooding into the library from the various departments. He regarded the following recommendations as the most important in the self-study report:

"The University should expand library holdings from the current 427,000 volumes to 800,000 volumes as rapidly as practicable, bearing in mind that all additions to the holdings should be carefully selected and chosen to support the curriculums now offered."

"The completion of the physical expansion of the library as recommended in the report dated October 9, 1970."

MINUTES OF MEETING OF LIBRARY COMMITTEE, OCTOBER 5, 1971 (Continued)

Resolution by Donald B. Stafford:

After discussion of the limited resources available to purchase books, Dr. Stafford introduced the following resolution to be included in the minutes:

"The University Library Committee is extremely concerned that the library is not receiving sufficient funds for new book acquisitions and personnel to adequately support the needed growth of the library in relation to the increasing student enrollment and expansion of graduate programs and professional education. This problem is particularly acute in view of the very low ranking of Clemson University as compared with other universities on the basis of the size of the book collection."

Dr. Jutras was requested to appoint a subcommittee to contact appropriate administrators and emphasize the need to improve the library. Dr. Jutras indicated that this subcommittee would be appointed in the near future.

Appointment of two subcommittees: Dr. Galloway and Mr. Watts were appointed to study the reasons why so many faculty and students fail to use the library. Dr. Calhoun and Mr. Rowe were appointed to study the way in which all students could be oriented to the use of the library.

Time of next meeting: Tuesday, November 5, 1971, 3:30 P.M.

Report and Recommendations from the Ad Hoc Committee

This committee is charged with the responsibility to investigate the feasibility of acquiring, cataloging, and storing audio-visual materials in the main library.

Recognizing the complexity of a study dealing with the physical facilities and services implied by the proposal of the Communications Resources Committee, this committee has confirmed its consideration to the question of the desirability of implementing this proposal, and reports its recommendations herewith:

It is the opinion of this committee that:

1. The administration of audio-visual equipment and resources is not justifiably a part of the library function.
2. College and department needs are sufficiently unique that no advantage would accrue from the implementation of a central audio-visual resource center.
3. The probable cost for capital investment and annual expense would greatly exceed the cost of inefficiency which is inherent to the present decentralized system.
4. User needs cannot always be anticipated sufficiently in advance to permit pre-scheduling of equipment and resources.

REPORT AND RECOMMENDATIONS OF UNIVERSITY AD HOC COMMITTEE (Continued)

The Ad Hoc Committee recommends, therefore:

- (a) The present decentralized system should be maintained.
- (b) Regardless of location, all equipment and resources should be available on a loan basis to any dept. or college. To facilitate this, a catalog should be prepared immediately. This catalog should list all equipment and resources, location and names of responsible person in charge.

Ralph Knowland, Chairman

ALUMNI ASSOCIATION

Joe Sherman (Dir) has been named a "Seasoned Sage" of the American College Public Relations Association. Sherman and 17 other members were approved by the ACPRA's Board of Trustees for having spent at least 25 years at colleges and universities advancing the support and understanding of higher education.

CHEMICAL ENGINEERING

D. F. Bruley (Prof) has publication with J. I. Elsey "JASON Procedure for Design of Multivariable Control Systems," I&EC Process Design and Development, 4, 431-441, Oct. 1971.

D. F. Bruley has paper presentation with T. A. McCracken "A Numerical Technique for Solution of Parabolic Partial Differential Equations," 21st Canadian Chemical Engineering Conference, Montreal, Canada, Oct. 12-15.

J. W. Hall (Prof) was speaker at Sept. meeting of Western N. C. Section of AIChE in Asheville, topic was "Catalysis, What and How?"

C. E. Littlejohn (Prof and Hd) was guest at TAPPI Research Conference in Seattle, Oct. 7-9.

The Chemical Engineering Dept was given an unrestricted gift of \$1,000 from the Monsanto Company. The department also received a gift of 36 hard-hats and 36 pairs of protective glasses from the Dow Chemical Company to aid the department's Safety Program.

CHEMISTRY

J. L. von Rosenberg, Jr. (Assoc Prof) presented a lecture entitled, "Sigma-tropic Rearrangements," before the chemistry faculty and students at Auburn University, Oct. 5.

H. G. Spencer (Prof and Hd) presented a seminar entitled, "NMR Determination of Copolymer Microstructure," for the physical chemistry division of the School of Chemistry, Georgia Institute of Technology, Sept. 30.

A gift of \$50 was received from Dr. James H. Young, Anderson, S. C., to support the experimental audio-tutorial general chemistry course being developed by J. F. Allen (Assoc Prof).

COLLEGE OF ARCHITECTURE

Three Clemson artists, Robert Hunter, Tom McPeak, and Mike Holden were among 54 artists from three states chosen to be represented in the 13th Annual Springs Travelling Art Exhibition. Selection of the art show was made by Perry T. Rathbone, Director of the Boston Museum of Fine Arts, from over 600 entries. The Springs Mills Exhibition will be shown by museums and galleries in New York, North Carolina, South Carolina, and Georgia.

Robert Hunter (Prof, Dept of History and Visual Studies) works in various media, and his entry in the show is an oil painting on paper called "Jesus Garden." Thomas McPeak (Assoc Prof and Hd, Dept of History and Visual Studies) submitted an acrylic painting entitled "Landscape." Mike Holden, Curator of the Rudolph Lee Gallery is represented in the show by a shaped canvas with acrylic entitled "Hyperbolic Paraboloid."

Raymond D. Bray (Visiting Assoc Prof, Dept of Planning Studies) participated in two "Goals for Georgia" statewide conferences. One on General Government, and the other on Transportation and Communication at the Marriott Hotel, Atlanta.

ELECTRICAL AND COMPUTER ENGINEERING

J. W. Lathrop (Prof) and J. W. Jones (Grad Stu) presented a paper, "Improved Electronics for Water Quality Monitoring," at the annual meeting of the Instrument Society of America in Chicago, Oct. 5.

ENGLISH

R. J. Calhoun (Alumni Prof) has written and recorded two lectures on "The Poetry of James Dickey" and one on "James Dickey's Deliverance" for the cassette series The Twentieth Century American Novel and Modern American Poetry, published by Everett/Edwards, Inc.

ENVIRONMENTAL SYSTEMS ENGINEERING

John H. Austin (Prof) led discussions on "Educational Systems for Plant Operators" at an International Association of Water Pollution Research workshop in Vienna, Austria, Sept. 20-24. This meeting, attended by 150 representatives from 24 countries, considered the topic "Design and Operation of Large Waste-water Plants."

John H. Austin represented the United States at a meeting of the International Water Supply Association in London, England where he presented information on Clemson's training effort for water and wastewater treatment plant operators. A number of British training institutions were visited during the tour Sept. 24-29.

FOOD SCIENCE

J. J. Jen (Asst Prof), C. C. Chen (USDA, Agronomy) and L. C. Hamilton (Ag Comm) served as co-hosts to a team visiting from Taiwan representing the Taiwan Soybean and Vegetable Oil Mission, Oct. 8-9. The purpose of the visit was to promote soybean and vegetable oil trade between South Carolina and the Republic of China. Following visits to seed companies, soybean production areas and export facilities in Columbia, Hartsville and Charleston, the group lunched with Lt. Gov. Earl Morris.

The following papers were recently published: "Effect of dietary fats on the fatty acid contents of chicken adipose tissue," Journal of Food Science 36: 925-929. J. J. Jen, W. P. Williams, Jr., J. C. Acton and V. A. Paynter. "Growth measurements on surface colonies of bacteria," Journal of General Microbiology 66:137-143. S. A. Palumbo, M. G. Johnson, V. T. Rieck, and L. D. Witter.

GIFTS AND GRANTS

A research grant in the amount of \$4,700 has been received by the Animal Science Department from Foremost-McKesson Foundation to assist with research on "Diets for Artificially Reared Pigs."

A Mini Gruel-Omatic Liquid Feeder has been received on loan by the Animal Science Department from Sollars Bros., Inc., for research with "Early Weaned Pigs."

INDUSTRIAL EDUCATION

J. Page Crouch (Assoc Prof) has been appointed Chairman of the International Graphic Arts Education Association. This appointment took place at the IGAEA's annual conference in St. Paul, Minn., Aug. 16-20.

W. E. West (Asst Prof) has been named by the South Carolina Industrial Arts teachers to serve on the State Curriculum Guide for Industrial Arts Steering Committee.

W. E. West served as a sectional chairman for the 10th Annual Southern Industrial Arts Conference meeting in Atlanta, Ga., Oct. 8-9. J. Page Crouch and D. Henry Pate (Asst Prof) were invitational speakers on "The Advancing Technologies."

INTERDISCIPLINARY STUDIES

M. J. Eitel (Assoc Prof) presented two research publications at the National Meeting of the American Chemical Society in Washington, D. C. on Sept. 16. The titles of these presentations were "Polymer Chain Distribution Functions for Use with Deformed Elastomeric Networks" and "Statistical Thermodynamics of Rubber Elasticity and the Equation of State for Unswollen Ideal Elastomers." Dr. Eitel also presented a paper, "Water Resistant Coatings for Water Soluble Glass." Coauthors for this research publication were D. A. Kay (Grad Stu) and S. F. Hulbert (Assoc Dean and Hd).

H. R. Bungay (Prof) has been appointed to the Advisory Board of the journal Biotechnology and Bioengineering.

LANGUAGES

Ed Arnold (Instr) presented a paper at a meeting of the South Carolina Chapter of the American Association of Teachers of German, held at Myrtle Beach, Oct. 2. The paper was entitled "Vocabulary Building in Elementary German Courses."

Gaston J. Fernandez (Assoc Prof) presented a paper "Marti hombre: su autoconcepcion en los Versos sencillos," at the 21st annual Mountain Interstate Foreign Language Conference held at Western Kentucky University, Bowling Green, Ky., Oct. 8-9.

H. E. Stewart (Prof and Hd) had an article "Ionesco in Search of Ionesco," published in The University of Tulsa Monograph Series, No. 12 (1971), pp. 51-62.

MECHANICAL ENGINEERING

C. A. Brandon (Assoc Prof) presented a paper entitled "Dynamic Membrane Hyperfiltration-Key to Reuse of Textile Dye Waste?" ASM paper No. 71-TEX-4 at the ASME Textile Engineering Conference held in Greenville on Oct. 13-14.

NURSING

Elizabeth J. Hall (Assoc Prof) is listed by the American Academy of Pediatrics as a collaborator in the writing of the manual, Care of Children in Hospitals.

RECREATION AND PARK ADMINISTRATION

C. R. White (Asst Prof) has recently completed directing a two-week resident camping program for 35 senior citizens of South Carolina. The program was held at Oconee State Park and was funded by the Kiwanis Clubs of South Carolina with support from the South Carolina Commission on Aging. Leadership was provided by 63 RPA students.

Herbert Brantley (Assoc Dean) was named president of the Society of Park and Recreation Administrators at the 1971 Congress for Recreation and Parks in Houston, Texas, Nov. 20. The society is a branch of the National Recreation and Park Association and represents 700 educators in some 170 colleges and universities having recreation and park curricula.

ZOOLOGY

Byron R. Ingram (Asst Prof) attended a meeting of the Division of Invertebrate Zoology, American Society of Zoologists at the Duke University Marine Laboratory, Beaufort, N. C., Sept. 17-19 and presented a paper entitled "The Life Histories of Two Species of Damselflies."

CALENDAR OF CAMPUS EVENTS

- Nov. 1 Mon. 2:00 p.m. Freshman Football - Clemson vs. Gordon Military at Barnesville, Ga.
- Nov. 1 Mon. 12:15 p.m. Physiology of Virus Infection - Dr. O.W. Barnett, Clemson University, Dept. of Plant Pathology & Physiology, 222 Long Hall.
- Nov. 2 Tues. 7:30 p.m. Physics Dept., Sigma Xi Lecture - Dr. P.A.M. Dirac, Nobel Laureate, Florida State University, Tallahassee, will speak on "Hopes and Fears of a Scientist" at Brackett Hall Auditorium.
- Nov. 2 Tues. Cross Country - State Meet - Furman.
- Nov. 2- Tues.-
Nov. 4 Thurs. Annual Farm and Small Business Income Tax Short Course- Clemson University Cooperative Extension Service in cooperation with the Internal Revenue Service, the South Carolina Tax Commission, and the South Carolina Association of Public Accountants - Holiday Inn No. 3, Florence, S.C.
- Nov. 3 Wed. 11:00 a.m.- 1:00 p.m. Pork Barbecue - Sponsored by the Block and Bridle Club - Littlejohn Coliseum.
- Nov. 3 Wed. 3:00 p.m. Physics Colloquium - Dr. P.A.M. Dirac will speak on "Hamiltonian Methods in Atomic Theory" at Lowry Hall Auditorium.
- Nov. 3 Wed. 3:30 p.m. Food Science Seminar - Mrs. Barbara D. Torr will discuss "The Fish Protein Concentrate Story." Room F-150, P&AS Bldg.
- Nov. 4 Thurs. 8:00 p.m. Graduate wives monthly meeting - YMCA.
- Nov. 4- Thurs.-
Nov. 5 Fri. Continuing Engineering Education - Seventh Air & Water Pollution Control Seminar, Earle Hall.
- Nov. 4 Thurs. 7:00 a.m. The Thursday Morning Quarterback Club - Harcombe Commons.
- Nov. 4 Thurs. 4:00 p.m. Environmental Systems Engineering - Dr. Ernest C. Tsivoglou of Georgia Institute of Technology, Atlanta, Georgia will speak on "Reaeration studies using gaseous tracers," in 302 Rhodes Center.
- Nov. 5- Fri.-
Nov. 6 Sat. Appalachian State University - Novice Debate and Individual Events Tournament at Boone, N.C. -- Clemson Debaters.
- Nov. 6 Sat. 1:30 p.m. Varsity Football - Clemson vs. University of North Carolina at Chapel Hill, N.C.
- Nov. 6 Sat. 2:00 p.m. Soccer - N.C. State at Raleigh, N.C.

CALENDAR OF CAMPUS EVENTS Continued

- Nov. 8 Mon. 7:00 p.m. Foreign film, War of the Buttons (French), Daniel Hall Theatre - free.
- Nov. 8 Mon. Cross Country ACC Meet - at N.C. State.
- Nov. 8 Mon. 12:15 p.m. Dr. R. Walker Miller, Pee Dee Experiment Station, Florence, S.C., Osmotic Potential Relationships of Bacterial Spot of Pepper - Dept. of Plant Pathology and Physiology, 222 Long Hall.
- Nov. 9- Tues.-
Nov. 11 Thurs. Annual Farm and Small Business Income Tax Short Course- Clemson University Cooperative Extension Service in cooperation with the Internal Revenue Service, the South Carolina Tax Commission, and the South Carolina Association of Public Accountants - Francis Marion Hotel, Charleston, S.C.
- Nov. 10 Wed. 3:00 p.m. Soccer - Furman at Clemson.
- Nov. 10 Wed. 3:30 p.m. Food Science-Biochemistry Joint Seminar: Dr. Russell Pressey (Richard B. Russell Lab., Athens, Ga.) will speak on "Natural Enzyme Inhibitors in Plants." Room F-150, P&AS Bldg.
- Nov. 11- Thurs.-
Nov. 12 Fri. Annual Dairy Science Conference, Clemson House.
- Nov. 11 Thurs. 10:00 a.m. IM&TS Seminar Series - Stephen P. Parke, Corporate Director of Advertising, M. Lowenstein & Sons, New York, New York -- Sirrine Hall Auditorium.
- Nov. 11 Thurs. 7:00 a.m. The Thursday Morning Quarterback Club - Harcombe Commons.
- Nov. 11 Thurs. 4:00 p.m. Chemistry Seminar - Prof. W.A. Van Hook, University of Tennessee, "Solvent Isotope Effects on the Thermodynamic Properties of Some Aqueous Electrolyte Solutions" -- Room 131 Brackett Hall.
- Nov. 12 Fri. Continuing Engineering Education - High School Teachers Workshop (Interactive Computing), Riggs Hall.
- Nov. 12 Fri. 6:00 p.m. Annual Awards Banquet of the Dixie Section of The Institute of Food Technologists at the Clemson House. Representatives for F. Ritter and Company and Gerber Products Company will present \$1,000 scholarship awards and plaques to Miss Suzanne Pickens and Mr. Herb Davis, respectively, both Clemson University seniors majoring in Food Science. The after-dinner speaker will be Dr. Alvin A. Close, Chief of Poultry Investigations at the Richard B. Russell Research Laboratory, Athens, Ga., whose topic will be "Current Research Related to Poultry Product Quality."

CALENDAR OF CAMPUS EVENTS Continued

Nov. 13	Sat.	1:30 p.m.	Varsity Football - Clemson vs. Maryland (IPTAY Day).
Nov. 14-	Sun.-		1971 Board of Visitors.
Nov. 16	Tues.		
Nov. 15-	Mon.-		Continuing Engineering Education, seminar-workshop,
Nov. 16	Tues.		Introduction to Experimental Stress Analysis --
			Lowry Hall.
Nov. 15	Mon.	12:15 p.m.	Dept. of Plant Pathology & Physiology; Dr. W.M. Epps,
			Clemson University, Alteration of Host Metabolism --
			222 Long Hall.

PROCEDURES FOR SUBMITTING NEWSLETTER MATERIAL

All Calendar items of campus events (speakers, films, meetings, seminars, sporting events, etc.) should be submitted by written memorandum directly to the Office of Public Relations, Trustee House. Information and news items from the Office of the President, Vice President for Business and Finance, Vice President for Executive Affairs, Vice President for Student Affairs and the Vice President for Development should be submitted by written memorandum to the Office of Public Relations, Trustee House. Information and news items from all areas under the Vice President for Academic Affairs should be submitted by written memorandum to Dr. Claud B. Green, Room 28, Tillman Hall.

The following deadlines prevail: Items to appear in the Newsletter published the 1st of each month must be submitted by the 20th of the previous month; items to appear in the Newsletter published the 15th of each month must be submitted by the 5th of each month.

CLEMSON

NEWSLETTER

INFORMATION FOR THE STAFF OF CLEMSON UNIVERSITY

Vol. 11 No. 7

November 15, 1971

CHANGE IN BLUE CROSS-BLUE SHIELD INSURANCE RATES

On October 1, a memorandum was distributed announcing an increase in our Blue Cross-Blue Shield insurance premium rates. The total amount of this increase was \$2.25 on a single plan and \$5.60 on a family plan. This increase was to be effective with the December premium.

As a result of Phase II of the Wage-Price Freeze, National Blue Cross Headquarters has advised individual state plans that they must revise their rating formula. (Continued on page 18.)

MEMORANDUM FROM THE PRESIDENT

MEMORANDUM TO: The Faculty and Staff of Clemson University

SUBJECT: Visitation of the Committee from the Southern Association
of Colleges and Schools

My appreciation goes to all of you who have made such a substantial contribution to the preparation of the Institutional Self-Study, and the cooperation and assistance you have given to the members of the Visitation Committee from the Southern Association of Colleges and Schools.

In the Exit Interview the Committee was most laudatory of your efforts to make Clemson University an institution of educational excellence. Undoubtedly the detailed Evaluation will identify areas in which improvement or corrections will be required. I know I can rely on your continued efforts to rectify any deficiencies that may be identified.

I am proud of your accomplishments and assure you of my continued participation and support in our mutual efforts toward perfection of our University.


Robert C. Edwards
President

MINUTES OF THE MEETING OF THE FACULTY SENATE, SEPTEMBER 14, 1971

The meeting was called to order at 4:16 p.m. by President Sawyer. The minutes of the meeting of August 17, 1971 were approved as circulated.

President Sawyer amended a list of announcements which had previously been distributed to Senators. A tentative date for a special meeting of the Faculty Senate to discuss the proposed revision of the faculty manual was set for September 28. Copies of the proposed revision will be distributed to Senators prior to that meeting. Appointments of Faculty Senate representatives to University committees have been made as follows: Professor E. A. Vaughn, Discipline Committee; Professor M. D. Sherrill, Library Committee; and Professor E. P. Willey, Improvement of Undergraduate Teaching.

Particular attention was called to the announcement concerning the request of the Student Senate for Faculty Senate opinion on the matters of "dead days" and student evaluation of professors. Senators were urged to think particularly about possible modifications in the present evaluation system. This item was passed to the Welfare Committee and will be discussed further in the October Senate meeting.

President Sawyer reported that the University Traffic and Parking Committee had looked into questions which have been raised by Senators concerning reserved parking spaces. It was pointed out that the owner of such a space, if off campus, could release that space thus freeing it for use by other individuals, and that no vehicle in a reserved parking space would be given a parking violation ticket unless reported by the owner of the reserved space. Questions and problems relating to parking in general were raised and will be passed to the Traffic and Parking Committee for their consideration, particularly the possible use of excess parking spaces in one zone by faculty members located in other zones.

President Sawyer reported on the status of the motions passed by the Senate concerning traffic control devices on campus. Recommendations from the Traffic and Parking Committee relating to those requests are presently being prepared to be sent to President Edwards and it is hoped that traffic devices to break the flow of traffic on S. Palmetto Blvd. will also be installed. The request for a traffic light at the intersection of Fort Hill Street and Williamson Road will not be met. However, other requests are being considered.

Concerning Senate activities of the previous year as they appeared in Ex-President Prochaska's annual report, it was moved and seconded that President Sawyer follow up the status of three items: the administration's decision not to delete the academic policy pertaining to the re-examination of students who fail to meet graduation requirements by six or fewer grade points; the decision not to alter at this time the present policy on the "Forgiveable F," and the lack of an administrative response to the requests that the time period allowed for dropping a course with a Withdraw Passing be reduced and that the time period allowed for dropping a course be no longer than one week after mid-term grades are due at the Registrar's Office.

MINUTES OF THE MEETING OF THE FACULTY SENATE, SEPT. 14, 1971 (Continued)

Professor J. W. Hubbard reported for the Policy Committee. With regard to reduction of the quorum at Faculty Senate meetings, Professor Hubbard stated that it is the feeling of that committee that since the entire faculty rather than the Faculty Senate must approve of such a change, and since there are reservations on the part of some Senators about reducing the number, the matter should be dropped for the time being. Concern on the part of some Senators was noted in that they did not wish to see the matter dropped. The Policy Committee requested President Sawyer to appoint an ad hoc committee to study the University Book Store operations in order to improve services rendered. For the benefit of Senators, President Sawyer gave a brief review of previous Senate concern on this matter.

Professor F. J. Keller, Chairman of the Admissions and Scholarship Committee, enumerated items which are presently being considered by that committee: graduate student placement; credit for courses by examination; the pass-fail system; the request of the Student Senate for consideration of two or three "dead days" in addition to Saturday and Sunday, between the end of classes and the beginning of exams; investigation of the practice in some departments of not giving full credit for the number of hours that students are required to meet for a lecture course; and present criteria for continuing enrollment of students.

Professor W. E. Castro, reporting for the Welfare Committee, stated that in the future the committee will plan to meet twice monthly. Items under consideration are health care for faculty, at least to the extent of a yearly physical examination; possibilities for a professional standards committee which would provide a mechanism for the faculty to evaluate and police itself; student evaluation of faculty; and problems relating to the retirement system.

Professor N. D. Camper, Chairman of the Research Committee, passed to Senators a report containing information from the following sources: a meeting of the Research Committee with Dr. R. W. Henningson, Assistant Dean of University Research, concerning University indirect costs; a report entitled "Direct and Indirect Costs of Research at Colleges and Universities," and a memorandum on the breakdown of University indirect cost rates from the Office of University Research. Professor Camper pointed out that as the report is read it should be kept in mind that difficulties arise in comparing indirect costs at Clemson with those of other institutions, in that all components of the indirect costs must be known. Another item which the Research Committee is considering concerns delays encountered in getting proposals in the proper format to meet deadlines.

There were inquiries from the floor indicating concern as to whether or not indirect costs work for or against the researcher. Also, in response to a question from the floor, Professor Camper pointed out that Dr. Henningson maintains a file, available for faculty use, on research proposal formats, and that a faculty member may go directly to Dr. Henningson for advice on writing grant proposals prior to actual approval of the proposal.

MINUTES OF THE MEETING OF THE FACULTY SENATE, SEPT. 14, 1971 (Continued)

Professor J. D. Fulton, Chairman of Ad Hoc Committee A on faculty facilities in the Clemson House, passed to Senators a report containing information on current activities of that committee, as well as information resulting from a meeting with Mr. S. G. Nicholas, Vice President for Development. Using a diagram of the floor plan of the Clemson House, Professor Fulton indicated the areas which the Executive Committee of the University has allotted for use as a faculty club facility. Professor Fulton requested suggestions from Senators and their constituents.

Professor W. F. Steirer moved that an Ad Hoc Committee B be appointed to investigate Clemson's book ordering systems. This was seconded and passed by voice vote.

The meeting was adjourned at 5:47 p.m.

Absent from the meeting was W. F. Beckwith.

MINUTES OF THE MEETING OF THE FACULTY SENATE, OCTOBER 5, 1971

A special meeting of the Faculty Senate, called for the purpose of considering the present draft of the faculty manual, was called to order at 4:30 p.m. The portion of the manual covered was that concerning Policy Statements, Academic Freedom, Regulations, and Faculty Ethics. Of thirty-nine alterations of the Senate's original version, twenty-eight were left unchanged. Following is a list of suggested changes approved by the Senate.

1. Under Academic Freedom - Statement: to reinstate the Senate's original wording of "and shall make every effort to indicate" in place of "and shall indicate"; and to substitute the following wording for that in the existing paragraph: "When speaking or writing, the faculty member has the right to identify himself by his academic rank and institutional affiliation; however, if he so identifies himself, he must indicate that he is or is not an institutional spokesman, whichever is appropriate. The faculty member is bound by the strictures in the preceding paragraph."
2. Under Academic Freedom - Regulations - Appointments for Which Tenure is Attainable: to replace the portion of the paragraph between the first and last lines with the following: "Staff with the rank of Instructor or higher, and including the professional librarians, are eligible for tenure. A minimum of 4 academic years of service at Clemson University is a prerequisite for tenure in any rank, except that of full professor. The total period of full-time service at Clemson University prior to the acquisition of tenure will not exceed 7 years. Previous full-time service with the rank of Instructor or higher in other institutions of higher learning will be applied up to 3 years of service beyond the required minimum of 4 years."

MINUTES OF THE MEETING OF THE FACULTY SENATE, OCT. 5, 1971 (Continued)

3. Under Termination of Appointment by the Faculty Member: to reinsert after "April 15" the following original wording: "or 30 days after receiving notification of the terms of his appointment for the coming year, whichever date occurs later."
4. Under Dismissal of Appointment by the University: to reinsert the Senate's original item which read: "The burden of proof that adequate cause exists rests with the University and shall be satisfied only by clear and convincing evidence in the record considered as a whole," and to reinsert the Senate's original item which read: "The hearing committee will grant adjournments to enable either party to investigate evidence concerning which a valid claim of surprise is made," and to replace the last sentence in their item #6 of the present draft with the Senate's original statement which read: "Where the witness cannot or will not appear, but the committee determines that the interests of justice require admission of his statement, the committee will identify the witness, disclose his statement, and if possible provide for interrogatories," and to reinsert the Senate's original item which read: "If the hearing committee concludes that adequate cause for dismissal has not been established by the evidence in the record, it will so report to the President. If the President rejects this report, he will state his reason for doing so, in writing, to the hearing committee and to the faculty member, and provide an opportunity for response before transmitting the case to the Board of Trustees. If the hearing committee concludes that adequate cause for a dismissal has been established, but that an academic penalty less than dismissal would be more appropriate, it will so recommend, with the supporting reasons."

A preference for order of the items was given as follows:

The Senate's first addition between present items #4 and 5

The Senate's second addition between present items #5 and 6

The Senate's third addition as the last item.

5. Under Suspensions: to change the wording of the first portion of the first sentence to read as follows:
"Until the final decision of dismissal from appointment from the University has been reached," ...
6. Under Terminal Salary or Notice: to eliminate the entire item which reads as follows:
"If the appointment is terminated, the faculty member will receive his salary for 12 months after the date of the notification of charges."

MINUTES OF THE MEETING OF THE FACULTY SENATE, OCT. 5, 1971 (Continued)

7. Under Faculty Ethics: to reinsert the Senate's original introductory statements which read:
"In the enforcement of ethical standards, the academic profession differs from those of law and medicine, whose associations act to assure the integrity of members engaged in private practice. In the academic profession the individual institution of higher learning provides this assurance and so should normally handle questions concerning propriety of conduct within its own framework by reference to a faculty group."

The general feeling of the Senate was that the discussion of the present draft of the faculty manual should be continued at the regular meeting of the Faculty Senate on October 12.

The meeting was adjourned at 7:20 p.m.

Absent from the meeting was J. H. Bond.

GRADUATE COUNCIL MINUTES, OCTOBER 8, 1971

The Graduate Council met in Room 21 of Tillman Hall on October 8, 1971. The meeting was called to order at 3:07 p.m. by Dean Schwartz. Members present during the course of this meeting were: Dean A. E. Schwartz, Dr. R. M. Allen, Dr. C. W. Bolen, Dr. N. D. Camper, Dr. C. R. Freeze, Dr. H. W. Graben, Dr. J. S. Wolf and Mr. Paul Mims.

The minutes of the Graduate Council meeting of September 10, 1971 were approved as distributed.

Dean Schwartz initiated a thirty-minute discussion concerning present and possible future policies on the transfer of graduate credits earned at other institutions to Clemson University. A committee was appointed to review the overall policy on transfer of credits, including the associated problem of time limitations for earning graduate degrees. With regard to this, Dean Schwartz indicated that he would supply all members of the Council with one copy of Standard X of the Southern Association. The committee which was appointed is composed of: Dr. N. D. Camper (Chairman), Mr. Paul Mims, and Dr. C. R. Freeze.

The following items were received by the members of the Graduate Council as information:

1. Clemson University Form: "Request for Approval of New Undergraduate/Graduate Course." Dated 8-71.

GRADUATE COUNCIL MINUTES, OCTOBER 8, 1971 (Continued)

2. Clemson University Form: "Application for Admission to the Graduate School." Dated 8-71.

3. Faculty Senate Proposal (modified) regarding the function and composition of the Graduate Council.

Dean Schwartz pointed out that the above form for new courses has been misused in some instances. Specifically, where one course is designated a replacement for a second course, the subject matter of the two courses should be similar. If the subject matter of the two courses is not clearly related, then the above form should be used to establish the new course and a separate memorandum should be employed to drop from the catalog the second course.

Dean Schwartz reinstituted a committee for the purpose of revising the Thesis Manual. Appointed to the committee were: Dr. J. S. Wolf (chairman), Dr. H. W. Graben, Dr. R. M. Allen, and Mr. James Bostic. A preliminary conference involving the Graduate Dean and the committee chairman will be held in order to establish the scope of this committee's activity.

A thirty-minute discussion was held concerning the role and content of 700-level graduate courses. Subsequently, the Graduate Council approved the following courses by the vote: five for, one abstention:

Geol	700	Earth Science I (Replacing Geol 800)
Geol	750	Earth Science II (Replacing Geol 850)
Ch	700	Physical Science for High School Teachers (Rep. Ch 800T)
Ch	701	Review of General Chemistry I (Rep. Ch 450, 650)
Ch	702	Review of General Chemistry II (Rep. Ch 850)
Math	701	Number Systems
Math	703	Geometric Concepts
Math	705	Algebra, Probability & Statistics
Math	711	Modern Algebraic Concepts I
Math	712	Modern Algebraic Concepts II
Math	721	Matrix Algebra I
Math	722	Matrix Algebra II
Math	731	Non-Euclidean Geometry
Math	741	Introduction to Linear Programming with Applications
Math	751	Fundamental Concepts of Calculus I
Math	752	Fundamental Concepts of Calculus II
Math	761	Probability and Statistics
Phys	701	Physics for High School Teachers I (Rep. Phys 305, 605, 801)
Phys	702	Physics for High School Teachers II (Rep. Phys 306, 606, 802)
Phys	703	Modern Physics for High School Teachers (Rep. Phys 803)
Phys	704	Astronomy for High School Teachers (Rep. Phys 804)
Math	987	Selected Topics in Numerical Processes
Mgt	810	Management and the Law

GRADUATE COUNCIL MINUTES, OCTOBER 8, 1971 (Continued)

Ed	707	Readings in Education
Ent	870	Advanced Insect Physiology (Rep. Ent 862)
BioE	802	Research Techniques in Biomaterials Evaluation
E&CE	844	Digital Signal Processing (Rep. E&CE 833)
ME	850	Advanced Dynamic Systems
ME	894	Seminar
WRE	871	Coastal Hydrodynamics (Rep. WRE 862)
WRE	872	Marine Pollution Control (Rep. WRE 861)

The following courses were administratively approved by Dean Schwartz:

AAH	815	History Seminar I (Rep. Arch 815)
AAH	816	History Seminar II (Rep. Arch 816)

The following courses were tabled by reason that the information supplied was incomplete and/or incorrect:

Math	861	Advanced Numerical Analysis I
Math	862	Advanced Numerical Analysis II
InEd	820	Recent Process Developments
InEd	845	Curriculum Planning and Development in Industrial Education
InEd	860	Curriculum Materials Development

These courses may be reconsidered at the next (special) meeting of the Graduate Council.

Dean Schwartz emphasized that in the future the Graduate Council will entertain requests for approval of 600-level courses only after the 400-level counterparts have been approved by the Curriculum Committee. This action alters the prior policy by which the Graduate Council had given tentative approval of 600-level courses contingent upon the subsequent approval of their 400-level counterparts.

Dean Schwartz provided to those members of the Council present, and for their information, selected computer printouts listing candidates for admission to the Graduate School.

Dean Schwartz announced that he would supply to members of the Graduate Council copies of an article dealing with a training program for graduate teaching assistants. Persons in charge of such training programs at Clemson University may be invited to describe their programs before the Council at a future meeting.

A special meeting of the Graduate Council will be held at 1:00 p.m. on October 18, 1971 in Room 21 of Tillman Hall at which time the main issue of business will be consideration of approval of 600-level courses.

GRADUATE COUNCIL MINUTES, OCTOBER 8, 1971 (Continued)

The next regularly scheduled meeting of the Graduate Council will be held at 3:30 p.m. on November 12, 1971 in Room 21 of Tillman Hall. Note that this and all future regular meetings for this semester will be scheduled on Fridays at 3:30 p.m.

Dr. Wolf moved for adjournment at 5:19 p.m., the motion was seconded and carried with Dr. Graben dissenting.

GRADUATE COUNCIL MINUTES, OCTOBER 18, 1971

The Graduate Council met in Room 21 of Tillman Hall on October 18, 1971 at 1:00 p.m. and was called to order by Dean Schwartz. Members present were: Dr. Bolen, Dr. Wolf, Dr. Camper, Dr. Freeze, Dr. Graben, Mr. Bostic. Others present for the meeting were: Mr. McPeak, Mr. Brown (for Professor Means), Dr. Cool (for Dr. Allen). Absent were Dr. Smith, Professor Means, Dr. Allen, and Mr. Mims.

The minutes of the Graduate Council meeting of October 8, 1971 were approved unanimously as distributed.

Dean Schwartz stated that the courses Poultry Science 652, 653, and 659 had 300 level undergraduate counterparts rather than the 400 level listed on the agenda.

The following courses were approved:

COLLEGE OF AGRICULTURAL SCIENCES

WB	616 (416)	Fish Culture
Ent	670 (470)	Insect Physiology
Ent	680 (480)	Insect Pathology (Rep. Ent 890)
PS	652 (352)	Breeder Flock and Hatchery Mgt. (Rep. PS 656)
PS	653 (353)	Breeder Flock and Hatchery Mgt. Lab (Rep. PS 657)
PS	659 (359)	Management of Egg, Broiler, and Turkey Enterprises (Rep. PS 654)
PS	605 (405)	Topical Problems

COLLEGE OF ARCHITECTURE

Vis	605 (405)	Drawing
Vis	606 (406)	Drawing
Vis	607 (407)	Painting
Vis	608 (408)	Painting
Vis	609 (409)	Sculpture
Vis	610 (410)	Sculpture
Vis	611 (411)	Printmaking
Vis	612 (412)	Printmaking
Vis	613 (413)	Photography

GRADUATE COUNCIL MINUTES, OCTOBER 18, 1971 (Continued)

Vis	614 (414)	Photography
Vis	615 (415)	Graphic Design
Vis	616 (416)	Graphic Design - Advanced Illustration
Vis	617 (417)	Advanced Ceramic Arts
Vis	618 (418)	Advanced Ceramic Arts
Vis	619 (419)	Graphic Design
Vis	620 (420)	Graphic Design
Vis	621 (421)	Graphic Design - Studio Seminar
AAH	611 (411)	Directed Research in Art History (Rep. Arch 611)
AAH	612 (412)	Directed Research in Art History (Rep. Arch 612)
AAH	613 (413)	20th Century Visual Arts (Rep. Vis 503)
Arch	675 (475)	Mechanical Plant (Rep. Arch 575, 875)
Arch	676 (476)	Mechanical Plant (Rep. Arch 576, 876)
Arch	681 (481)	Architectural Office Practice (Rep. Arch 581, 881)
Arch	682 (482)	Architectural Office Practice (Rep. Arch 582, 882)

COLLEGE OF EDUCATION

InEd	869	Curriculum Materials in Industrial Education
InEd	845	Curriculum Planning and Development in Industrial Education
InEd	820	Recent Process Developments

COLLEGE OF ENGINEERING

CrAr	601 (401)	Advanced Pottery
CrE	621 (421)	Experiments in Material Science for Teachers (Rep. CrE 320)
E&CE	626 (426)	Digital Computer Design
E&CE	627 (427)	Operational Amplifiers
E&CE	638 (438)	Process Instrumentation and Control Systems
ME	625 (425)	Kinematics 1: Kinematic Analysis of Machines

COLLEGE OF FOREST AND RECREATION RESOURCES

For	601 (401)	Logging and Milling (Del. of 3 hrs. lab from present course)
For	606 (406)	Wood and Wood Fiber Identification (one hr of lecture is added to this course to make 1 hr theory and 3 hrs lab)
For	609 (409)	Multiple-Use Forestry (Rep. For 806)
For	611 (411)	Harvesting Forest Products (Drop 1 hr from For 401)
For	620 (420)	Forest Products (Del. 3 hrs lab from present course)
For	624 (424)	Forest Genetics and Tree Breeding
For	623 (423)	Lectures in Forestry

COLLEGE OF INDUSTRIAL MANAGEMENT AND TEXTILE SCIENCE

IM	618 (418)	Management Information Systems
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GRADUATE COUNCIL MINUTES, OCTOBER 18, 1971 (Continued)

COLLEGE OF PHYSICAL, MATHEMATICAL, AND BIOLOGICAL SCIENCES

Ch	621 (421)	Advanced Organic Chemistry
Ch	622 (422)	Advanced Organic Chemistry Laboratory
Geol	600 (400)	Environmental Geology
Geol	607 (407)	Quaternary Geology
Math	861	Advanced Numerical Analysis I
Math	862	Advanced Numerical Analysis II
Bioch	871	Advanced Topics
Bioch	831	Physical Biochemistry

The following courses were tabled:

COLLEGE OF AGRICULTURAL SCIENCES

AgM	652 (452)	Farm Power (Rep. AgE 652)
AgM	660 (460)	Farm and Home Utilities (Rep. AgE 660)

COLLEGE OF ARCHITECTURE

AAH	617 (417)	Studies in the Art and Architecture of the Ancient World I (Rep. Arch 517)
AAH	618 (418)	Studies in the Art and Architecture of the Ancient World II (Rep. Arch 518)
AAH	619 (419)	Studies in the Art and Architecture of the Early Middle Ages I (Rep. Arch 519)
AAH	620 (420)	Studies in the Art and Architecture of the Early Middle Ages II (Rep. Arch 520)
AAH	621 (421)	Studies in the Art and Architecture of the Late Middle Ages I (Rep. Arch 521)
AAH	622 (422)	Studies in the Art and Architecture of the Late Middle Ages II (Rep. Arch 522)
AAH	623 (423)	Studies in the Art and Architecture of the Renaissance I (Rep. Arch 523)
AAH	624 (424)	Studies in the Art and Architecture of the Renaissance II (Rep. Arch 524)
AAH	625 (425)	Studies in the Art and Architecture of the Technological Revolution I (Rep. Arch 525)
AAH	626 (426)	Studies in the Art and Architecture of the Technological Revolution II (Rep. Arch 526)
AAH	627 (427)	Studies in the Development of Architectural Technology I (Rep. Arch 527)
AAH	628 (428)	Studies in the Development of Architectural Technology II (Rep. Arch 528)
AAH	629 (429)	Studies in the Art and Architecture of India and the Far East I (Rep. Arch 529)
AAH	630 (430)	Studies in the Art and Architecture of India and the Far East II (Rep. Arch 530)

GRADUATE COUNCIL MINUTES, OCTOBER 18, 1971 (Continued)

COLLEGE OF EDUCATION

InEd 610 (410) Special Institute Course: Industrial Education
InEd 614 (414) Electronics (Rep. InEd 314)

COLLEGE OF ENGINEERING

BioE 660 (440) Bio-Process Development

Dr. Camper brought to the attention of the Council that there was an error in the information concerning Entomology 680. This course does not replace Entomology 890 per se but rather Entomology 890 should simply be deleted from the catalog.

Dean Schwartz then discussed the Agricultural Mechanization courses on the agenda. He stated that the undergraduate courses were only conditionally approved at the Curriculum Committee meeting last Friday, October 15, 1971 pending approval of an undergraduate curriculum by the Commission on Higher Education in Agricultural Mechanization. It was stated that it may be some time before the undergraduate curriculum was approved.

The AAH courses were then discussed at length. Mr. McPeak informed the group these would be administered by a new department formed this year, the Department of History and Visual Studies, with two units within the department: 1) Art and Architectural History, and 2) Visual Studies. It was brought out that if these courses are to be used as a minor, then a proposal requesting a new program should be sent to the Commission on Higher Education. Dean Schwartz indicated that he would discuss this matter further with the College of Architecture for clarification.

Dr. Graben made a motion for adjournment, the motion was seconded and carried. Dean Schwartz reminded the Council that the next meeting was scheduled for Friday, November 12, 1971 at 3:30 p.m.

AGRICULTURAL ECONOMICS AND RURAL SOCIOLOGY

J. C. Hite (Assoc Prof) has been appointed Chairman of the Legislative Affairs Sub-Committee of the State Board of Health's Taskforce on Environmental Health.

J. C. Hite presented a seminar and visited with faculty and staff at the University of Kentucky, Lexington, on Oct. 28-29. The title of the seminar was "Economic and Environmental Repercussion of Area Development."

AGRICULTURAL ENGINEERING

J. R. Lambert (Assoc Prof) presented a paper entitled "Dynamics of Water in the Soil-Plant-Atmosphere System: A Model Named TROIKA," co-authored with F. W. T. Penning de Vries (Agricultural University, Holland) at a Symposium on Soil-Water-Physics and Technology, held in Rehovot, Israel Aug. 29 - Sept. 4. While enroute, he visited with researchers in Holland in relation to dynamic modeling of biological systems.

CIVIL ENGINEERING

J. Edwin Clark (Assoc Prof) presented a paper entitled "Future of Helicopter in EMS Programs" at the annual Congress of American College of Surgeons in Atlantic City, N. J. on Oct. 21.

Billy L. Edge (Asst Prof) participated in the annual meeting of the Water Pollution Control Federation held in San Francisco, Calif. on Oct. 4-6.

Donald B. Stafford (Assoc Prof) represented South Carolina at a meeting on Oct. 13 in Wilmington, N. C. to plan a symposium on Coastal Engineering in the Coastal Plains Region. His trip was sponsored by the Coastal Plains Center for Marine Development Services.

COLLEGE OF EDUCATION

Harold F. Landrith (Dean) was an invitational speaker and panel member at the 5th annual National Vocational-Technical Teacher Education Seminar on assessment of graduate programs in Atlanta, Ga., Oct. 27. Dean Landrith's address was entitled "Accountability for Graduate Programs in Vocational and Technical Education."

COLLEGE OF ENGINEERING

L. G. Rich (Dean) was a member of a site visit team for the Environmental Protection Agency which reviewed programs in environmental engineering at the University of Michigan and the University of Toledo on Oct. 25-29.

L. G. Rich has been appointed effective immediately to membership on the Mobility Equipment Command Scientific Advisory Group of the Department of the Army.

COLLEGE OF INDUSTRIAL MANAGEMENT AND TEXTILE SCIENCE

William C. Laffoday (Dir of Professional Development) addressed the Sales and Marketing Executives of America Meeting in Greenville on Oct. 25. The subject of the address was "Do Your Marketing Communications Really Demand an Answer?"

Wm. C. Laffoday addressed the annual "Man of the Year" Phi-Psi Honorary Textile Fraternity Banquet in Seneca, Oct. 22.

An intensive short course "Flame Retardance of Fibers: Flammability, Heat Resistance, Chemical Treatments, Incineration" will be held Dec. 8-10 in cooperation with Plastics Institute of America, Inc. R. H. Barker (Assoc Prof) is the course director.

"Special Topics in Color Scheme" is the title of a seminar to be held in Surrine Hall Auditorium, Dec. 6-8. Frederick Simon (J. E. Surrine Prof) is the chairman.

E. S. Olson (Assoc Prof) will be the chairman for a "Knitted Fabrics: Preparation, Dyeing, and Finishing" seminar to be held in Surrine Hall Auditorium on Dec. 1-2.

ECONOMICS DEPARTMENT

In response to Dr. Frank Close's request that he be relieved of administrative duties as head of the department of Economics, effective Oct. 31, 1971, Dean W. D. Trevillian, in addition to his other duties, is named Acting Head of the department. In this capacity Dr. Trevillian will be assisted by an Ad Hoc Committee consisting of H. H. Macaulay (Alumni Prof), W. C. Whitten (Prof), and B. R. Skelton (Assoc Prof).

ELECTRICAL AND COMPUTER ENGINEERING

This department has received the following gifts:

\$5,000 from Duke Power Company for studies in power.

\$2,265 from the Alan G. Stanford fund for support of graduate studies in Electrical and Computer Engineering.

Two RCA-301 computers from Southern Bell for use as teaching aids in computer design by undergraduates.

One Trice digital differential analyzer system from NASA through a cooperative equipment loan. The system cost \$385,000 and is for special studies in logic design.

ENGLISH

Charles Montgomery (Instr) presented an hour program for High School speech teachers on "Preparing the student for extemporaneous speaking" at the fall meeting of the South Carolina Speech Association on Nov. 10.

ENTOMOLOGY AND ECONOMIC ZOOLOGY

S. B. Hays (Assoc Prof and Hd) attended and reported on research at Clemson to a called meeting of USDA Cooperative Agreement Imported Fire Ant Research Workers in Gainesville, Fla., Oct. 18-20.

Harold A. Loyacano, Jr. (Asst Prof) participated in the S-83 expanded executive committee meeting at Georgetown and Hobcaw Barony on Oct. 14-16.

ENVIRONMENTAL SYSTEMS ENGINEERING

Wade H. Ponder, Training Coordinator and Revisions Editor for the American Chemical Society's ChemTec Project, served as a panel member to describe the ChemTec curriculum to industrial and academic participants at the Two Year College Chemistry Conference in St. Louis on Oct. 28-30.

John H. Austin (Prof) has been appointed to serve on an advisory committee established by the Environmental Protection Agency to develop a system for evaluating a number of training programs conducted by EPA.

Four of the Environmental Systems Engineering Faculty members participated in the Seminar Program for the South Carolina Press Association on Oct. 22. J. F. Andrews (Prof and Hd) spoke on "Water Pollution Control Through Improved Operation of Wastewater Treatment Plants," followed by J. H. Austin (Prof) who spoke on "Treatment Plant Operator Programs." T. M. Keinath (Asst Prof) gave information on the "Treatment of Textile Wastes." "A Constructive Role for Citizens and Conservationists in Environmental Decision Making" was the topic of B. C. Dysart's (Assoc Prof) presentation.

B. C. Dysart III presented a paper entitled "Determination of Public Environmental Preferences in Water Resources Planning and Development" at the American Society of Civil Engineers National Environmental Engineering meeting in St. Louis Oct. 18-22. This paper was co-authored by A. H. Barnett (Instr Economics). An article by Dr. Dysart entitled "Alternate Policies for River Basin Water Quality Management" is included in the proceedings of the Fourteenth Congress of the International Association of Hydraulic Research which was held Aug. 29-Sept. 3 in Paris.

FOOD SCIENCE

D. M. Henricks (Assoc Prof) has a publication entitled "Effect of an Intra-Uterine Foreign Body During the Estrous Cycle on Plasma Progesterone in Guinea Pigs" in the October issue of the Proceedings for Experimental Biology and Medicine.

GEOLOGY

George M. Haselton (Assoc Prof) participated in a three-day study of the deposits around the terminus of the Aletsh Glacier in Switzerland in late August. Dr. Haselton took part in a field trip through the Central Appalachians hosted by the Geological Society of America, Oct. 29-31. Representatives from 30 colleges and universities studied in the field and discussed in seminars the erosional features developed in this region. Of particular significance were the landslide and avalanche features created by hurricane Camille in central Virginia.

INDUSTRIAL MANAGEMENT

C. H. Whitehurst, Jr. (Prof and Hd), F. R. Himsworth (Visiting Prof), B. J. Todd (Prof) and R. F. Zant (Asst Prof) participated in the Seventh Annual Meeting of the Southeastern Chapter of the Institute of Management Science held at Blacksburg, Va., Oct. 21-23. Professor Whitehurst served as chairman of the opening session. Professor Himsworth presented a paper on "Management Science in the Business and Academic Community in the United Kingdom." Professor Todd is Secretary-Treasurer of the Southeastern chapter of TIMS. The theme of the meeting was "Management Science in the Functional Business Areas."

MATHEMATICAL SCIENCES

John Kenelly (Prof and Hd) represented the Mathematical Association of America at the inauguration of H. P. Graham as President of Vorhees College, Denmark, S. C. on Oct. 22.

John Kenelly attended an invitational conference at Atlanta, Ga., on Oct. 23 and 24, to preview the forthcoming national report of the Committee on the Undergraduate Program in Mathematics' Teacher Training Panel. The CUPM programs are funded by the National Science Foundation.

Joel V. Brawley, Jr. (Assoc Prof) presented a lecture at a Mathematics Colloquium at the University of Tennessee at Chattanooga on Oct. 20.

PHYSICS

Robert L. Chaplin (Assoc Prof) recently had a paper published titled "Complex Annealing Within Stage I of Aluminum," in the Journal Radiation Effects.

SOCIAL SCIENCES

W. C. Capel (Asst Prof) has published with R. Adams, W. Bloom and G. Stewart, Tulane Medical Center, "Heroin Addicts on Methodone Replacement: A Study of Dropouts," in The International Journal of The Addictions, June, 1971.

Patricia K. Hill (Assoc Prof) served as moderator for the session "Diplomatic Innovation in Early Modern Europe," W. Leon Pippin, Jr. (Instr) presented a paper entitled "Georgia Politics of the Depression and New Deal Era," and James E. Sargent (Instr) served as commentator for the session "The Depression: Politics and Relief," all at the Duquesne History Forum, Pittsburgh, Pa., Oct. 27-29.

TEXTILE DEPARTMENT

E. S. Olson (Assoc Prof) attended the AATCC Palmetto Section Summer Meeting, Asheville, N. C., Aug. 6-8 as a guest speaker and reviewed the contributions made by the Palmetto Section members in terms of growth, research done, papers presented, and attention to student support.

J. L. Lundberg (Assoc Prof) presented the Polymer Seminar of the Dept. of Chemical and Metallurgical Engineering at the University of Tennessee in Knoxville on Nov. 4. His subject was "Light Scattering by Fibers."

Donald W. Lyons (Assoc Prof of Textile and Mech Eng) served as local arrangements chairman for the National Textile Engineering Conference in Greenville, Oct. 12-14.

D. W. Lyons and J. D. Hatcher (Post doctoral fellow) presented a paper entitled "Noise Safety" at the National Safety Congress in Chicago, Ill.

D. W. Lyons was elected Associate Director of the Textile Industries Group of the Instrument Society of America.

H. M. El-Behery (Assoc Prof) and T. D. Efland (Prof and Associate Dean) presented a paper entitled "Latest Development in Textile Machinery and Technology" in the 1971 Textile Engineering Conference, organized by the Textile Engineering Division of the American Society of Mechanical Engineers, held in Greenville, Oct. 13-14.

ZOOLOGY DEPARTMENT

William Bachop (Asst Prof) and John Price (Ohio State University) describe how extra sets of chromosomes come to occur within some nuclei of bony fish embryos in the October issue of the Journal of Morphology.

E. D. Brodie (Asst Prof) with R. A. Nussbaum (Oregon State University) published a paper "The Taxonomic status of the rough-skinned newt, *Taricha granulosa* (Skilton) in the Rocky Mountains," in *Herpetologica* 27:260-270.

E. D. Brodie and Ronnie R. Howard (Research Asst) published a paper "Experimental study of mimicry in salamanders involving *Notophthalmus viridescens* and *Pseudotriton ruber schencki*," in Nature, Sept. 24.

COUNSELING CENTER

Dr. Virginia S. Hardie (Director) was chosen President-Elect of the South Carolina Mental Health Association at the Annual Meeting of the Association in Columbia, October 22.

CHANGE IN BLUE CROSS-BLUE SHIELD INSURANCE RATES Continued from Page 1

Using this revised formula caused the amount of our increase to be less than announced in October. Our new total increase to be effective in December will be \$1.60 on the single plan and \$4.00 on the family plan. Following is a breakdown of amounts which we now pay and the new rates after the increase becomes effective:

COVERAGE	WE ARE NOW PAYING		NEW PREMIUM	
	Single	Family	Single	Family
Blue Cross only	4.75	11.75	5.80	14.35
Blue Cross and Blue Shield	6.65	16.80	8.25	20.80
Blue Cross-Blue Shield and Major Medical	8.52	21.24	10.52	25.24

If you have questions regarding this matter, please call Mr. W.J. Stamey, Personnel Office, Extension 2426.

CALENDAR OF CAMPUS EVENTS

Nov. 15-	Mon.-		Continuing Engineering Education, seminar-workshop;
Nov. 16	Tues.		Introduction to Experimental Stress Analysis, Lowry Hall.
Nov. 15	Mon.	12:15 p.m.	Dept. of Plant Pathology & Physiology, Dr. W.M. Epps, Clemson Univ., Alteration of Host Metabolism, 222 Long Hall.
Nov. 16-	Tues.		Annual Farm and Small Business Income Tax Short Course-
Nov. 18	Thurs.		Clemson University Cooperative Extension Service in cooperation with the Internal Revenue Service, the South Carolina Tax Commission, the the South Carolina Associ- ation of Public Accountants - Poinsett Hotel, Green- ville, S.C.

CALENDAR OF CAMPUS EVENTS Continued

Nov. 17	Wed.	8:00 p.m.	Clemson University Concert Series - The Preservation Hall Jazz Band - Littlejohn Coliseum.
Nov. 18- Dec. 12	Thurs.- Sun.		Architecture Exhibit - "Early Architecture and Planning of Nantucket" - Lee Gallery.
Nov. 18	Thurs.	7:00 a.m.	The Thursday Morning Quarterback Club -- Harcombe Commons.
Nov. 18	Thurs.	4:00 p.m.	Environmental Systems Engineering - Dr. Richard I. Dick of the University of Illinois, Urbana, Illinois, will speak on " Disposal of Sludge," in 302 Rhodes Center.
Nov. 19- Nov. 20	Fri. Sat.		Clemson Debaters - Gator Junior Invitational Debate Tournament, University of Florida, Gainesville, Florida.
Nov. 20	Sat.	1:30 p.m.	Varsity Football - Clemson vs. North Carolina State (Parents' Day)
Nov. 20	Sat.	9:00 a.m.- 1:00 p.m.	Declamation contest in French, German, and Spanish for high school students from S.C., N.C. and Ga. Sponsored by the Dept. of Languages - Daniel Bldg.
Nov. 24	Wed.		Thanksgiving holidays begin after last class.
Nov. 24	Wed.	7:00 a.m.	The Thursday Morning Quarterback Club -- Harcombe Commons.
Nov. 25	Thurs.		Thanksgiving Day.
Nov. 27	Sat.		Varsity Football - Clemson vs. University of South Carolina at Columbia, S.C.
Nov. 29	Mon.		Classes resume.
Nov. 29	Mon.	8:00 p.m.	Clemson University Concert Series - Five by The Six - Littlejohn Coliseum.
Nov. 29	Mon.	11:15 a.m.	Agronomy - Dr. E.A. Harre, TVA, Muscle Shoals, Ala.; The World Fertilizer Market - Room A-203 P&AS Bldg.
Nov. 30	Tues.	6:15 p.m.	Phi Kappa Phi will hold initiation of new members in the Purple Room of the Clemson House. The banquet honoring initiates will be held at 7:00 p.m. in the Clemson Room of the Clemson House. Dr. Corinne Sawyer, President of the Faculty Senate, will be the guest speaker.
Nov. 30- Dec. 1	Tues.- Wed.		Annual Farm and Small Business Income Tax Short Course - Clemson University Cooperative Extension Service in cooperation with the Internal Revenue Service, the South Carolina Tax Commission, and the South Carolina Association of Public Accountants - Hiers House, State Fair Grounds, Columbia, S.C.

PROCEDURES FOR SUBMITTING NEWSLETTER MATERIAL

All Calendar items of campus events (speakers, films, meetings, seminars, sporting events, etc.) should be submitted by written memorandum directly to the Office of Public Relations, Trustee House. Information and news items from the Office of the President, Vice President for Business and Finance, Vice President for Executive Affairs, Vice President for Student Affairs and the Vice President for Development should be submitted by written memorandum to the Office of Public Relations, Trustee House. Information and news items from all areas under the Vice President for Academic Affairs should be submitted by written memorandum to Dr. Claud B. Green, Room 28, Tillman Hall.

The following deadlines prevail: Items to appear in the Newsletter published the 1st of each month must be submitted by the 20th of the previous month; items to appear in the Newsletter published the 15th of each month must be submitted by the 5th of each month.

CLEMSON

NEWSLETTER

INFORMATION FOR THE STAFF OF CLEMSON UNIVERSITY

Vol. 11 No. 8

December 1, 1971

UNIVERSITY ENROLLMENT REACHES RECORD HIGH

Fall semester enrollment at the University has reached a record high of 8,890, up over 10 per cent from last year. The total includes 6,865 undergraduates, 1,551 graduate students and an enrollment of 474 at the University's Greenville and Sumter campuses.

The 2,181 undergraduates attending main campus classes for the first time include the largest freshman class ever, 1,865, and 316 transfer students. More women, 2,216, are enrolled in the University's 10 colleges and schools than ever before. Coeds now make up about one-third of the freshman class and the total enrollment.

Undergraduate enrollment is largest in the College of Engineering (1,163) followed by the new College of Physical, Mathematical and Biological Sciences (1,142), and the Colleges of Education (1,091), and Industrial Management and Textile Science (1,039).

The Graduate School has recorded its highest enrollment of 1,551, a 14 per cent increase since last year. The College of Education has the largest number of graduate students (370) followed by the Colleges of Physical, Mathematical and Biological Sciences (236), Engineering (197), and Agricultural Sciences (115).

NEWSLETTER TO PUBLISH DECEMBER ISSUES

The Newsletter will publish two issues during the month of December. All items to appear in the December 15th issue must be submitted by the 6th; items to appear in the January 1st issue must be submitted by the 10th.

MINUTES OF THE ADMINISTRATION-FACULTY-STUDENT COUNCIL, SEPT. 17, 1971

Chairman Joseph Hutchinson called to order the regular meeting of the AFSC at 1:15 p.m., Friday afternoon, Sept. 17, in the Student Government Board Room

The following were present: Chairman Hutchinson, Corinne Sawyer, Manning N. Lomax, Fred J. Keller, Vernon Hodges, A. Wood Rigsby, Kenneth Vickery (visitor), Secretary George Moore. Absent were: John Marshall, E.H. McCarter and Angela Prince.

ACTION: A motion by Dr. Sawyer that the minutes of the meeting of September 10, 1971 be approved as distributed was seconded and passed.

(Continued on page 2.)

MINUTES OF THE ADMINISTRATION-FACULTY-STUDENT COUNCIL, SEPT. 17, 1971, Continued

The Chairman introduced Dean Kenneth Vickery, Assistant Vice President for Student Affairs and Dean of Admissions and Registrations, for a discussion on the Pass-Fail system and the "Forgivable F."

Dean Vickery reviewed some of the variations of the Pass-Fail system as it exists at other institutions. Some of the points made included: 1) there is no great interest in the system on the part of students at Clemson; 2) the same general lack of interest exists at most institutions that have tried it; 3) the original intent of the program to encourage students to experiment with electives out of their field has not been realized. The Ad Hoc Committee of the Association of Collegiate Registrars and Admissions officers established to survey grading policies at member institutions generally came to the same conclusions.

Regarding the "Forgivable F," the concensus of the faculty representatives is that the plan as it is now being administered at Clemson is unfair. It is felt that the faculty would be happier with the grading system as it was without the "forgivable F," or with it as originally resolved by the Faculty Senate. Dean Vickery assured the Council that he would work with the faculty in every way possible to resolve the problems that now exist with the "forgivable F" rule.

Without objection, the Chairman called adjournment at 2:05 p.m. The next meeting of the Council will be Friday, Sept. 24, 1971 at 1:10 p.m. in the Student Government Board Room.

MINUTES OF THE ADMINISTRATION-FACULTY-STUDENT COUNCIL, SEPT. 24, 1971

Chairman Joe Hutchinson called the regular meeting of the AFSC to order at 1:10 p.m. in the Student Government Board Room.

The following were present: Chairman Hutchinson, Corinne Sawyer, Manning Lomax, Fred J. Keller, Vernon Hodges, John Marshall and Angela Prince. Absent were: A.W. Rigsby, E.H. McCarter, George Moore.

Discussion continued on the erasable F and pass-fail subjects and whether the procedures can be implemented as originally proposed by the Faculty Senate.

ACTION: A motion by Dr. Keller was seconded and passed unanimously recommending to the President the following addition to the Faculty Senate's recommendation on retaken work and determining GPR: "Should a course be discontinued, the student may take another similar course for the purpose of raising his grade point ratio. That student's advisor shall decide the course that may be used for this purpose." (Amended 10/8/71)

It was noted that this provision would apply only when a course is discontinued; at present the grade received on the discontinued course is not erasable.

ACTION: After stipulating that the provisions of the preceding motion are not retroactive, the Council voted unanimously to accept a motion by Dr. Hodges recommending that the provisions of the preceding motion be effective beginning with the first summer session of 1972.

MINUTES OF THE ADMINISTRATION-FACULTY-STUDENT COUNCIL, SEPT. 24, 1971 Continued

ACTION: Dr. Keller's motion that the Council meet bi-weekly beginning Oct. 8, 1971 was seconded and passed. The Council will not meet Oct. 1, 1971.

Without objection, the Chairman called adjournment at 2:05 p.m.

MINUTES OF THE ADMINISTRATION-FACULTY-STUDENT COUNCIL, OCT. 8, 1971

Acting Chairman John Marshall called the regular meeting of the AFSC to order at 1:15 p.m. in the Student Government Board Room

The following were present: Corinne Sawyer, Angela Prince, A. Wood Rigsby, Fred Keller, Manning Lomax, John Marshall. Absent: George Moore, Joe Hutchinson and E.H. McCarter.

Without objection, the minutes of the meeting of Sept. 24 were amended to add to the motion concerning forgivable F, the portion underlined:

ACTION: "In the case of freshmen who reschedule courses that were passed or failed in their first semester, the student's grade-point ratio will be corrected to reflect only the grade obtained in the rescheduled course (s). Should a course be discontinued the student may take another similar course for the purpose of raising his grade point ratio. The student's advisor shall decide the course that the student may use for this purpose."

ACTION: The minutes of the meeting of Sept. 24, with the aforementioned amendment, were approved.

ACTION: A motion by Dr. Keller to schedule the next meeting of the Council for Oct. 29 was seconded and passed.

Without objection, adjournment was called at 1:37 p.m.

MINUTES OF THE ADMINISTRATION-FACULTY-STUDENT COUNCIL, OCT. 29, 1971

Acting Chairman John Marshall called the regular meeting of AFSC to order at 1:34 p.m. in the Student Government Board Room

The following members were present: John D. Marshall, Vernon S. Hodges, Fred J. Keller, Manning N. Lomax, Angela Prince, Corinne Sawyer. Absent: Joe Hutchinson, George Moore, Wood Rigsby, E.H. McCarter.

Mr. Marshall distributed information to the members of the Council on the South Carolina Public Interest Research Group (SCPIRG) and proposed the following resolution:

RESOLUTION: The Administration-Faculty-Student Council of Clemson University hereby declares its support of the primary goals of the South Carolina Public Interest Research Group and urges the administration to give this movement serious consideration. However, the Council cannot support the structure or financial mechanics of this organization until further study has been undertaken by this council.

MINUTES OF THE ADMINISTRATION-FACULTY-STUDENT COUNCIL, OCT. 29, 1971 Continued

ACTION: The motion to accept this resolution was seconded and passed, all members present voting "aye."

After agreeing to meet next on Friday, Nov. 19, 1971 at 1:10 p.m. in the Student Government Board Room, The Council adjourned.

MINUTES OF THE ADMINISTRATION-FACULTY-STUDENT COUNCIL, NOV. 19, 1971

In the absence of Chairman Joseph Hutchinson, John Marshall acted as chairman and called the regular meeting of AFSC to order at 1:15 p.m. in the Student Government Board Room.

The following members were present: John Marshall, E.H. McCarter, Corinne Sawyer, M.N. Lomax, Vernon Hodges and George Moore. Absent were: Joseph Hutchinson, Angela Prince, Fred Keller and A. Wood Rigsby.

ACTION: A motion by Dr. Sawyer that the minutes of the meetings of September 17, October 8 and October 29 be approved as distributed was seconded and passed.

Discussion continued on the subject of the Student Bill of Rights with indication from both faculty and student affairs representatives that extensive study is being given the bill and reports should be forthcoming early next semester.

ACTION: A motion by Mr. Marshall that the Council meet next on Friday, January 14, at approximately one o'clock was seconded and passed.

Discussion continued on SCPIRG and the resolution adopted by AFSC at the meeting of October 29. Mr. Marshall indicated that the petition drive to determine student interest in the program and means for financing will likely come early next semester.

Mr. Lomax reported briefly on the visitation referendums. With some idea now of the number of students who desire visitation privileges, the Student Affairs Office is working toward implementation of the program at the start of next semester.

Without objection, the Chairman called adjournment at 2:10 p.m.

GENERAL FACULTY MEETING

A meeting of the General Faculty has been set for 2:00 p.m. on Tuesday, December 14, 1971, in the auditorium of Tillman Hall. This will be followed by School and College Faculty Meetings at 3:30 p.m.

GRADUATE COUNCIL MINUTES, NOVEMBER 12, 1971

The Graduate Council met in Room 21 of Tillman Hall on Nov. 12, 1971 at 3:30 p.m. and was called to order by Dean Schwartz. Members present were: Dr. Camper, Dr. Wolf, Dr. Graben, Dr. Lander (for Dr. Bolen), Mr. Mims, Dr. Freeze, Dr. Smith, Prof. Hodges (for Prof. Means), Mr. Bostic, Dr. Cool (for Dr. Allen), Dr. Sawyer (guest), and Dr. Kenelly (guest). Absent were: Dr. Bolen, Prof. Means, and Dr. Allen.

Dean Schwartz introduced Dr. Corinne Sawyer and Dr. John Kenelly as special guests for the meeting. Each was invited to discuss their programs to train and supervise graduate teaching assistants in their respective departments, English and Mathematics. Dean Schwartz informed the Council that others would be invited from time to time as special guests to discuss subjects pertinent to matters being considered by the Graduate Council.

Dean Schwartz asked for approval of the Oct. 18, 1971 Graduate Council minutes. Dr. Wolf noted that two courses, English 610 and Architecture 603, were approved but did not appear in the minutes. Dr. Graben moved for the approval of the minutes subject to approved corrections, the motion was seconded and approved unanimously.

Dean Schwartz reminded the Council that the next meeting would be held on Friday, December 10, at which time the approval of candidates for December graduation would be considered.

Residency requirements for professional degree programs were discussed at length in regard to a request from Dr. Littlejohn, Head of the Department of Chemical Engineering that: "Residency requirements for all Professional degrees taken part-time shall be satisfied if approximately 2/3 of credits offered for the degree are residency credits." Dr. Freeze made a motion that this proposal be accepted in principle with an amendment that a representative from each of the colleges offering professional degrees review the wording which is to be placed in the graduate catalog. The motion was seconded and approved unanimously.

The following courses were approved:

Biology	700	Principles of Biology
Biology	750	Biology for High School Teachers
English	762	English Literature for Teachers
Agronomy	602(402)	Land Pollution Control
Rur. Soc.	601	Human Exology

GRADUATE COUNCIL MINUTES, NOVEMBER 12, 1971 (Continued)

The two courses previously approved but omitted from the Oct. 18, 1971 minutes were:

English	610(410)	Middle English Literature
Arch	603(403)	Seminar in the Analysis and Criticism of Architectural and Town Building Works (Rep. Arch 503)

Information from the Nutrition Committee was distributed to the Council and the subcommittee revising the thesis manual was requested to incorporate this in their overall study. Prof Hodges (for Prof Means) made a statement in behalf of the Architecture Department regarding the policies regulating the writing of theses.

Dr. Graben made a motion to adjourn, the motion was seconded and carried.

FORT HILL CLEMSON CLUB ELECTS OFFICERS; SETS LADIES NIGHT

A record crowd of club members turned out for the recent annual business meeting of the Fort Hill Clemson Club. The principal order of business was the selection of officers for 1972 to officially take office after the Spring Ladies Night banquet. A unanimous vote greeted the nominations committee report recommending William C. Laffoday (IM&TS) for President; Donald Fowler (Excelsior Finishing Plant) for Vice President; H. Betts Wilson (IM&TS) for program chairman; and George Moore (Development) for Secretary-Treasurer.

M.B. "Speck" Farrar announced that the 1972 Clemson Week Around the World ladies night program has been set for Friday evening, March 3, 1972 at the Clemson House. Also to be announced at that occasion is the recipient of the Club's Alumnus of the Year Award. Ernest B. Rogers, George Moore and Edward Olson were appointed to the Awards Committee and nominations are now being received by the Club Secretary.

AGRONOMY

The American Society of Agronomy has a new publication entitled The Journal of Environmental Quality. Researchers in all disciplines of basic and applied sciences, not only agriculture, are invited to submit manuscripts for publication in the new journal. Papers may report the effects of specific practices and substances, including chemicals, of agricultural or nonagricultural origin on environmental quality, ecosystems; biological methods of pest control; integrated pest control programs for individual pests and ecosystems; management or disposal of agricultural wastes or use of soil for disposal of wastes; and environmental quality aspects of land use and development.

AGRICULTURAL ECONOMICS AND RURAL SOCIOLOGY

L. M. Bauknight (Prof) presented a paper, "Tax Management for Small Woodland Owners," at the annual meeting of the South Carolina Forestry Association held in Columbia on Oct. 28.

CHEMISTRY

The following papers were presented at the 23rd Southeastern Regional meeting of the American Chemical Society, Nashville, Tenn., Nov. 4-6:

A. R. Pinder (Prof) and S. J. Price (Grad Stu), "Synthetic Studies Directed Towards the Acorane Group of Bicyclic Sesquiterpenes."

A. R. Pinder (Prof) and A. K. Torrence (Grad Stu), "Total Synthesis of ($\pm$)-Fukinone and of Natural (+)-Hydroxyeremophilone."

C. B. Bishop (Assoc Prof), "A Systematic Approach to Solving Chemical Equilibrium Problems."

J. F. Geldard (Assoc Prof) and V. A. Fishman (Grad Stu), "The Absolute Configuration of Bis-Tridentate Chelate Complexes of Zinc(II) and Nickel(II) Ions."

J. C. Fanning (Prof) and L. L. Dickens (Grad Stu), "Some Studies on Iron(II) Phthalocyanine."

Norma Golden (Grad Stu) and G. L. Powerll (Asst Prof), "Amino Acid Dependent Control of Phospholipid Synthesis in Stringent and Relaxed Strains of Escherichia coli."

J. C. Fanning (Prof) was chairman of a section of the Inorganic Conference.

F. B. Brown (Assoc Prof) and Nina Charles (Grad Stu) recently published, "Barriers to Linearity in Triatomic Molecules. I. Development of a Curvilinear Quantum Mechanical Model Appropriate for Large Amplitude Bending Motion in Triatomic Molecules of C_{2v} Symmetry," Journal of Chemical Physics, 55, 4481 (1971).

COLLEGE OF ARCHITECTURE

R. H. Hunter (Prof), John Acorn (Assoc Prof), and Tom Turner (Instr) are represented in the Guild of South Carolina Artists 21st Annual Juried Exhibition at the Gibbes Art Gallery, Charleston, Oct. 31-Nov. 30. The work was juried by Mrs. Adelyn Breeskin, Art Consultant and Curator of Contemporary Art, National Collection of Fine Arts, Smithsonian Institution.

V. S. Hodges (Prof) attended the Society of Architectural Historians tour of Historic Charleston on Oct. 20-24 as a member of the host committee representing the Historic Charleston Foundation.

The Department of Building Science was host to Mr. J. R. Walker, Head of Bateson's Estimating Department on Nov. 10-11. Mr. Walker spoke the 10th to the Building Construction students on "The Construction Industry." The Bateson Company is located in Dallas, Tex. but their operations are throughout the U.S. They were the prime contractors of S. C.'s largest hospital, the Columbia Hospital of Richland County, and also constructed the home of the Dallas Cowboys, (the largest roofed stadium in the U.S.). Mr. Walker was here to interview Clemson students for future employment in his firm.

Joseph Young (Prof) attended the Governor's Conference on Land Use Planning in Columbia, Nov. 11.

Ken Carpenter (Assoc Prof) and Jim Dalton (Asst to the Dean) attended the American Institute of Architects New Communities Conference in Washington, D.C., Nov. 3-5. The conference and adjunct seminars dealt with the economic, social, and physical problems encountered in the existing new communities and the potential of alternate solutions for new communities under Title 7 Legislation of the 1970 Housing Act.

COLLEGE OF ENGINEERING

L. G. Rich (Dean) was appointed Vice-Chairman of the Commission on Education for the Engineering Profession at the 85th Annual Convention of the National Association of State Universities and Land-Grant Colleges in New Orleans, La. on Nov. 7-8.

L. G. Rich presented a seminar at Georgia Institute of Technology in Atlanta, Ga. on Nov. 17, entitled "Math Models as an Aid in Interpreting Eutrophication Phenomena."

L. G. Rich attended a public hearing in Columbia on Nov. 18 held by the Committee on Plants for Facilities for Recovery of Nuclear Fuel and the Storage of Waste Nuclear Material of which he is serving as a member appointed by the Governor.

COLLEGE OF ENGINEERING - CONTINUING ENGINEERING EDUCATION

The 7th Annual Air and Water Pollution Control Seminar will be held on Dec. 9-10 at the Clemson House. Session Chairmen for the seminar include: A. R. Abernathy (Assoc Prof), Environmental Systems Engineering, F. C. Alley (Prof), Chemical Engineering, and Deaver L. Allen, Chm., Western Section, AIChE, Dow Badische Company, Anderson, S. C.

Highlighting the seminar will be Mr. Jack Ravan, Regional Administration, Environmental Protection Agency, Atlanta, Ga., who will be the banquet speaker. Additional details may be obtained from Prof. R. A. Banister, Director, Continuing Education, College of Engineering, 116 Riggs Hall.

ELECTRICAL AND COMPUTER ENGINEERING

J. W. Lathrop (Prof) and J. W. Jones (Grad Stu) presented a paper entitled, "A Thermal Survey Instrument Using LSI Data Storage," at the joint conference on Sensing of Environmental Pollutants at Palo Alto, Calif., Nov. 9.

ENVIRONMENTAL SYSTEMS ENGINEERING

Who Is Responsible for Clean Water? This was the theme of an environmental control workshop for twenty-five municipal and county officials held on Nov. 8 in Rock Hill and at Yemassee on Nov. 15. The workshop was sponsored by the Environmental Systems Engineering Dept. as part of a grant under Title I of the Higher Education Act of 1965 and the Public Services Career Program of the Environmental Protection Agency.

John H. Austin (Prof) has been appointed as a member of Environmental Engineering Technology Advisory Committee of the Sumter Area Technical Education Center. In this capacity he will assist with the development of curricula for the Sumter program.

John H. Austin attended the annual meeting of the National Sanitation Foundation Board of Public Health Consultants in Ann Arbor, Mich. on Nov. 11-12. Dr. Austin is currently a member of this organization.

Four of the Environmental Systems Engineering staff participated in the 22nd annual meeting of the Pollution Control Section of the S. C. Water and Pollution Control Association held in Columbia on Nov. 11-12. Ray Abernathy (Assoc Prof) was program chairman assisted by J. M. Glennon, Jr. (Sanitary Engineer) and Dana W. Love (Sanitary Engineer). Each presided at technical sessions. Ray Abernathy was elected chairman of the section for the coming year.

T. M. Keinath (Asst Prof) presented an invited paper entitled "Fluid-Bed Adsorption" at the 22nd annual conference at the Florida Pollution Control Association and the Florida section of the American Water Works Association at Miami Beach, Nov. 10.

ENVIRONMENTAL SYSTEMS ENGINEERING (Continued)

B. C. Dysart III (Assoc Prof) and Andy H. Barnett (Instr, Economics) presented a paper entitled "Public Preferences and Environmental Quality in South Carolina -- Results of the Greenville County Study" at the annual meeting of the South Carolina Water and Pollution Control Association in Columbia Nov. 11-12.

John F. Andrews (Prof and Hd) has been appointed by Governor West as a member of the South Carolina Pollution Control Authority. He attended a meeting of the Authority in Columbia on Nov. 8.

FORESTRY

W.J. Barker (Prin Ext Spec) was awarded the Charles H. Flory Distinguished Service Award by the South Carolina Forestry Association at their annual meeting in Columbia on Oct. 27.

J. R. Saucier (Visiting Asst Prof) presented a paper entitled "Response in Growth and Wood Properties of American Sycamore to Fertilization and Thinning" on Nov. 10 at a symposium sponsored by the U. S. Forest Products Laboratory, American Paper Institute, and the Technical Association of the Pulp and Paper Industry, held at Madison, Wis.

HONORS PROGRAM

Norman Olsen, Jr. (Chairman) represented the University at the annual meeting of the National Collegiate Honors Council in Ann Arbor, Mich., Oct. 21 through Oct. 23.

INTERDISCIPLINARY STUDIES

S. F. Hulbert (Assoc Dean), F. M. King, Jr., (Walter Reed Hospital, Bethesda, Md) and J. J. Klawitter (Asst Prof) had the paper entitled "Initial Surface Interaction of Blood and Blood Components with Al_2O_3 and TiO_2 ," published in J. Biomed. Mater. Res. Symposium, Vol 2, pp 69-90, (1971). J. J. Klawitter and S. F. Hulbert also had the following paper published "Application of Porous Ceramics for the Attachment of Load Bearing Internal Orthopedic Applications," in J. Biomed. Mater. Res. Symposium Vol 2, pp 161-230 (1971).

S. F. Hulbert, S. J. Morrison (Grad Stu) and J. J. Klawitter had the paper entitled "Compatability of Porous Ceramics with Soft Tissue; Application to Tracheal Prostheses," published in J. Biomed. Mater Res. Symposium, Vol 2 pp 269-290 (1971).

INTERDISCIPLINARY STUDIES (Continued)

H. B. Skinner (Post doc), S. F. Hulbert, J. J. Klawitter, R. B. Leonard (Postdoc), and S. F. Morrison (Grad Stu) presented a paper entitled "Tissue Response to Three Ceramics of Porous and Non-Porous Structure" at the American Ceramic Society's 24th Pacific Coast Regional Meeting in Anaheim, Calif. on Nov. 1.

H. B. Skinner, S. F. Hulbert, R. J. Topazian (Hd, Oral Surgery, Medical College of Georgia), W. B. Hammer (Asst Prof, Oral Surgery, Medical College of Ga), and J. J. Klawitter presented a paper entitled "Use of Ceramics in Maxiofacial Prosthesis" at the American Ceramic Society's 24th Pacific Coast Regional Meeting in Anaheim, Calif. on Nov. 1.

J. S. Wolf (Assoc Prof) has received \$41,731 from the Department of the Air Force to conduct research entitled, "An Investigation of the Thermal Runaway Phenomenon as it Pertains to Laser Welding."

J. S. Wolf has received a grant for \$5,000 from the South Carolina Heart Association to continue his research on the "Effect of Surface Pretreatment of Titanium Upon the Clotting Time of Physiological Fluids."

LANGUAGES

Rob Roy McGregor (Asst Prof) has an article titled "The Misunderstanding over the Sabbath in Candide" appearing in Romance Notes, XIII, 2, 1971.

MATHEMATICAL SCIENCES

James L. Flatt (Assoc Prof) attended the Fall Conference of the Association of South Carolina Mathematics Teachers in Columbia, on Nov. 6 and presented a talk entitled, "Role of Geometry in the Secondary School."

MECHANICAL ENGINEERING

Tah-teh Yang (Prof) participated in the 24th Annual Conference on Engineering in Medicine and Biology held in Las Vegas, Nev. on Oct. 31 - Nov. 3. Two articles co-authored by Dr. Yang were published in the conference proceedings: with J. A. Pearce (Grad Stu) of the Medical University in Charleston, the paper "Abrasive Removal of Burn Eschar with Low Temperature Supersonic Nozzle," and with H. L. Huang (Grad Stu in Interdisciplinary Studies) "A Method of Extending Versatility of CO₂ Jet Used for Surgical Purposes."

PHYSICS DEPARTMENT

Malcolm J. Skove (Prof) gave a talk at Wofford College on Oct. 18, entitled "Superconductivity."

The following persons presented papers at the SES-APS meeting in Columbia Nov. 4-6:

Robert L. Chaplin (Assoc Prof) and John Klinck (Undergraduate) presented "A Preliminary Analysis of Stage III in Aluminum."

Robert L. Chaplin (Assoc Prof) and George R. Fletcher (Grad Stu) gave "Study of the Annealing Behavior for Titanium."

Malcolm J. Skove (Prof) and James W. Cook (Grad Stu) presented "Stress Dependence of T_c in In-Tl and In-Pb Whiskers."

John Ray (Assoc Prof) and Joseph Foster (Grad Stu) presented "A Tachyon Dust Metric." John Ray also presented "Appell's Principle of Least Constraint."

J. R. Manson (Asst Prof) and Brian Gaffney (Grad Stu) presented "Accommodation Coefficient for a Square Well Potential."

H. W. Graben (Prof) and Richard Roedersheimer (Grad Stu) presented "Harmonic Oscillator Model for Dispersion Forces Using the Dalgarno-Lewis Sum Rule."

James E. Payne (Asst Prof) and Max Sherrill (Assoc Prof) presented "Non-linear Flux Flow Resistivity in Superconducting Tin Films."

Max Sherrill gave an invited paper entitled "Fluxon Motion in Superconducting Films."

F. J. Keller (Assoc Prof) presented "M-center Triplet Formation in KCl."

F. J. Keller (Assoc Prof) and Raymond C. Turner (Asst Prof) presented "An ESR Study of Thermal and Radioactive Decomposition of Poly(ethylene Terephthalate)."

P. B. Burt (Assoc Prof) and E. P. Stillwell (Prof and Hd) chaired sessions at the meeting.

SCHOOL OF NURSING

The School of Nursing will sponsor a conference on "Mental Health of Lower Socioeconomic Families" on Dec. 8 from 9:00 A.M. to 3:30 P.M. at the Clemson House. The main speaker will be Mrs. Hilda Richards, Coordinator of Clinical Services in the Psychiatric Rehabilitation Program at Harlem Hospital, New York. A panel comprised of community members will discuss how the community views its mental health problems and needs.

SOCIAL SCIENCES

R. A. Rimkus (Asst Prof) and D. E. Smith (Instr) presented "A Partial Study of the Impact of an Inter-Nation Simulation Upon the Participants," at the Southern Political Science Association meetings at Gatlinburg, Tenn., Nov. 11. W. H. Owens, Jr. (Assoc Prof) was chairman of a panel on "The Teaching Role in Political Science" at the same meeting.

G. S. Rent (Asst Prof) presented "Problems Among Relocated Families in Cluster Housing Developments," at the Pilot Housing Program Conference sponsored by the Clemson University Extension Service, Nov. 16.

J. L. Arbena (Asst Prof) presented "Colombian Reactions to the Independence of Panama, 1901-1904," at the meetings of the Southern Historical Association, Houston, Tex., Nov. 18.

James E. Sargent (Instr) recently completed an interview for the weekly radio broadcast, Clemson Report which featured the uses of oral history, particularly in connection with his work on F. D. Roosevelt advisers like Raymond Moley.

CALENDAR OF CAMPUS EVENTS

Dec.	2	Thurs.	8:00 p.m.	Graduate wives' monthly meeting - YMCA.
Dec.	4	Sat.		Basketball - freshmen and varsity, Clemson vs. Davidson at Charlotte, N.C.
Dec.	6	Mon.		Examinations begin.
Dec.	9	Thurs.		Seminar, Continuing Engineering Education.
Dec.	10	Fri.		Continuing Engineering Education, seminar - Maintenance of State of the Art Electronics, Riggs Hall.
Dec.	10	Fri.		Seventh Annual Air and Water Pollution Control Seminar, Clemson House.
Dec.	11	Sat.	8:00 p.m.	Basketball - varsity, Clemson vs. Purdue -- freshmen vs. Anderson.
Dec.	11	Sat.		Graduate Record Examination.
Dec.	15-	Wed.		Architectural Exhibit - "The Plastic Transformation #1" -- Lee Gallery.
Jan.	9	Sun.		
Dec.	16	Thurs.		Mid-year graduation.
Dec.	16	Thurs.		Joint Army/Air Force Commissioning.

PROCEDURES FOR SUBMITTING NEWSLETTER MATERIAL

All Calendar items of campus events (speakers, films, meetings, seminars, sporting events, etc.) should be submitted by written memorandum directly to the Office of Public Relations, Trustee House. Information and news items from the Office of the President, Vice President for Business and Finance, Vice President for Executive Affairs, Vice President for Student Affairs and the Vice President for Development should be submitted by written memorandum to the Office of Public Relations, Trustee House. Information and news items from all areas under the Vice President for Academic Affairs should be submitted by written memorandum to Dr. Claud B. Green, Room 28, Tillman Hall.

The following deadlines prevail: Items to appear in the Newsletter published the 1st of each month must be submitted by the 20th of the previous month; items to appear in the Newsletter published the 15th of each month must be submitted by the 5th of each month.

CLEMSON

CLEMSON UNIVERSITY LIBRARY
SOUTH CAROLINA ROOM DEC 13 1971

NEWSLETTER

INFORMATION FOR THE STAFF OF CLEMSON UNIVERSITY

Vol. 11 No. 9

December 15, 1971

MINUTES OF UNIVERSITY LIBRARY COMMITTEE MEETING, NOVEMBER 2, 1971

Present: M. W. Jutras (Chairman), William E. Bachop, R. J. Calhoun, Elizabeth Galloway, Julian H. Higgins (for Opal Hipps), Ralph Knowland, David Rowe (Student Senate), R. E. Schoenike, D. B. Stafford, J. M. Wannamaker, Patrick Watts (Student Representative), J. W. G. Gourlay (Secretary).

Minutes of the meeting of October 5 were approved. D. B. Stafford wished to have inserted that his resolution at the meeting of October 5 had been unanimously approved.

Dr. Jutras reported: (1) That he had appointed Dr. Wannamaker, Chairman, H. H. Wilson, W. E. Bachop, D. B. Stafford, and W. W. Wilson as an Ad Hoc Committee to contact appropriate administrators and emphasize the need to improve the library. Dr. Jutras made the following recommendation: (2) I strongly recommend that the Director of the Library (Mr. Gourlay) and the Library's Faculty Senate representative (Miss Sophia Sullivan) conduct a careful study of the status of professional librarians at Clemson and at other institutions: that they consult with Clemson University's own professional librarians to ascertain their wishes regarding the Library Self-Study Recommendations (C.U. Self-Study Rpt. VI-p. 92) pertaining to faculty status, ranks, etc.; and that they prepare a set of recommendations for this Committee's consideration.

Dr. Jerrold Orne, University Librarian, University of North Carolina, and a member of the Visiting Committee from the Southern Association was a guest of the meeting and remarked as follows:

(1) He commented on the excellence of the library self-study and noted that it is without question the best production of its kind that he has had to work with in all his experience.

(2) He regarded the report of the Ad Hoc Committee charged with the responsibility to investigate the feasibility of acquiring, cataloging, and storing audio-visual materials in the main library as a carefully thought out report. From his own experience he cited the unique nature of audio-visual facilities, the professional competence needed, the expense of such a program, and the necessity for the library to exert its efforts in concentrating on book collections, rather than branch out into an audio-visual area where the competence was not presently available on the library staff. (Continued on page 2.)

MINUTES OF UNIVERSITY LIBRARY COMMITTEE MEETING, NOVEMBER 2, 1971 Continued

(3) He remarked on the smooth working of the circulation system (designed by Mr. Robert Wiggins of the Computer Center) which had been extremely well effected but advised against proceeding further at this time with automation because (a) the bibliographical records of libraries are still not yet adequately standardized and (b) the equipment has not been developed to a stage which is economically sound. He noted that three of the largest libraries, Columbia, Chicago, and Stanford, are experimenting with total automated systems but the approach is unique and tremendously expensive. He indicated that it should be understood that these three systems, after many years and much expenditure, are still experimental and are as yet not operational.

(4) He endorsed the plan to reach a minimum library collection of 800,000 volumes as quickly as is practicable but commented that when this goal had been attained we could take pride only in having achieved the minimum standard for an institution of the nature of Clemson. Primary efforts and budget expenditure should be aimed at this goal.

Following his remarks there was a question, answer and discussion period.

Time of next meeting: November 30, at 3:30 p.m. Because examinations will be in progress the first Tuesday of December, there will not be a December meeting.

AGRICULTURAL ECONOMICS AND RURAL SOCIOLOGY

L. M. Bauknight (Prof) was the guest speaker for the Annual Stockholders meeting of the Palmetto Production Credit Association held in Greenwood on Nov. 11.

CHEMISTRY

G. L. Powell (Asst Prof) has presented the following lectures: "Pantothenate Metabolism in E. Coli," with J. E. Sabaitis (Grad Stu), Sixth Annual Lipid Conference, University of North Carolina, Chapel Hill, Oct. 22. "Stringent and Relaxed Control of Phospholipid Synthesis in E. Coli," with Norma Golden (Grad Stu), Sixth Annual Lipid Conference, University of North Carolina, Oct. 22. "Stringent and Relaxed Control of Phospholipid Synthesis in E. Coli," Dept. of Biochemistry, University of Georgia, Nov. 22.

Publication: A. R. Pinder (Prof) and J. C. Craig, "An Improved Method of Resolution of Coniine," J. Organic Chemistry, 36, 3648 (1971).

COLLEGE OF EDUCATION

Arthur K. Jensen, Director of the Vocational Education Media Center, has been granted a leave of absence beginning December 1, 1971, to go to Nigeria where he will establish a media program for the Nigerian government. Robert T. Benson will serve as Director while Dr. Jensen is on leave.

COLLEGE OF INDUSTRIAL MANAGEMENT AND TEXTILE SCIENCE

J. A. Turner (Asst Prof) will be the chairman for a "Phase II Short School (Economic Stabilization Program)" to be held in Sirrine Hall Auditorium, Dec. 17.

"A Compliance Workshop: Occupational Safety and Health" was held in Sirrine Auditorium on Nov. 9 with Donald W. Lyons (Assoc Prof) and John Hatcher (Post Doc Fellow) as co-chairmen. Due to the high demand for this topic, two additional workshops have been scheduled for Dec. 14 and Jan. 25.

Mrs. Rhelda Barron (Asst Prof), chairman, and the members of the accounting faculty, co-sponsored a "Federal Tax Seminar" with the Internal Revenue Service in the Earle Hall Auditorium on Nov. 17.

ECONOMICS

Alejandro Velez (Instr) invited W. C. Whitten (Prof) and Paul Zipin (Asst Prof) to participate in a radio panel. The show, which was aired on WSBF, Nov. 22 at 7:30 p.m. was a pilot in a series aimed at presenting faculty views on current problems. The topic was President Nixon's current economic policies. The moderator of the program, Mike Purcell, is a student in one of Mr. Velez' classes and had in conversations with him, developed the format of the program.

ELECTRICAL AND COMPUTER ENGINEERING

T. L. Drake (Assoc Prof) and J. A. Miller (Grad Stu) authored a paper entitled "EDITDT - An Analog Data Acquisition, Display, and Editing Software System" which was presented at the 1971 DECUS Fall Symposium in San Francisco on Nov. 11-13. T. L. Drake also served as the chairman of the Simulation Session.

ENGLISH

C. L. Montgomery (Instr) has been appointed South Carolina chairman for the Southern Forensic Association, an affiliate of the American Forensic Association. The appointment is effective immediately.

Richard J. Calhoun (Alumni Prof) has been appointed general editor of the cassette tape series on modern poetry published by Everett/Edwards, Inc. The series consists of taped lectures for colleges and high schools by leading critics on modern poets.

ENTOMOLOGY AND ECONOMIC ZOOLOGY

Richard F. Nash, Jr. (Asst Prof) attended and participated in the Pecan Insect Work Conference in Byron, Ga., Nov. 1-4.

T. E. Skelton (Assoc Prof) attended and participated in the Annual Cumberland-Shenandoah Fruit Workers Meeting in Winchester, Va., Nov. 18-19.

T. R. Adkins, Jr. (Prof) attended the annual meeting of the Entomological Society of America in Los Angeles, Calif., Nov. 28 - Dec. 2. He delivered an invitational address, "Highlights of Veterinary Entomology, 1971," and a paper on "Deer Fly Control in South Carolina." He presided as chairman of the committee on Professional Training, Standards and Status.

The dates for the 21st Annual Pesticide Chemicals School have been changed from January 25 and 26, 1972 to Jan. 26 and 27. The program will be held in the Clemson Room at the Clemson House. C. A. Thomas, Jr. (Assoc Ent - Ext. Ent) is chairman for the school.

J. B. Kissam (Assoc Ent - Ext Ent) as chairman, has announced the dates for the 15th Annual Pest Control Operator's School, Feb. 7 and 8, 1972. This school will have sessions at the Clemson House and laboratory exercises in Long Hall.

GEOLOGY

Villard S. Griffin (Assoc Prof) participated in a field trip through the Piedmont of Maryland, hosted by the Geological Society of America and led by members of the Maryland Geological Survey, U. S. Geological Survey and the Johns Hopkins University, Oct. 29-31. The purpose of the trip was to present new interpretations resulting from recent research in that region.

INTERDISCIPLINARY STUDIES

A paper entitled "Scanning Electron Microscopic Analysis of Fracture in Bovine Bone" by F. W. Cooke (Assoc Prof) and H. Zeidman, M.D. of Philadelphia appeared in 1971 edition of Surgical Forum Vol XXII. Surgical Forum is the published proceedings of the annual Clinical Congress of the American College of Surgeons.

F. W. Cooke (Assoc Prof) participated in the October meetings of the Technical Committees for Non-Ferrous Metals and for Dental-Medical Materials of the Metallurgical Society of AIME in Detroit. Dr. Cooke is a member of both committees.

INDUSTRIAL MANAGEMENT

J. M. Wannamaker (Assoc Prof) was awarded the professional certificate of Certified Public Accountant by the South Carolina Board of Accountancy on Nov. 4.

POULTRY SCIENCE

M. A. Boone (Prof) has been granted a leave of absence to act as an Animal Science Adviser to the National Agricultural Center, Saigon, South Vietnam.

A paper "Cholesterol Content of Market Eggs" by D. E. Turk (Assoc Prof) and B. D. Barnett (Prof and Hd) was published in the most recent issue of Poultry Science.

James T. Parker and M. A. Boone published an article entitled "Thermal Stress Effects on Certain Blood Characteristics of Adult Male Turkeys" in the most recent issue of Poultry Science. M. A. Boone and B. L. Hughes had an article, entitled "Wind Velocity as it Affects Body Temperature, Water Consumption and Feed Consumption During Heat Stress of Roosters," appear in the same issue of Poultry Science.

TEXTILE DEPARTMENT

Donald W. Lyons (Assoc Prof) was elected treasurer of the Executive Committee of the Textile Engineering Division of the American Society of Mechanical Engineers.

D. W. Lyons and John D. Hatcher (Post Doct Fellow) presented a paper entitled "Noise Surveys and Analysis" at the Southeastern Plant Engineering and Safety Conference in Atlanta, Ga.

J. J. Porter (Assoc Prof), D. W. Lyons and J. D. Hatcher presented a paper entitled "Characterization of Textile Effluents" at the 1971 Textile Engineering Conference sponsored by the American Society of Mechanical Engineers.

CALENDAR OF CAMPUS EVENTS

Dec. 15-	Wed.-		Architectural Exhibit - "The Plastic Transformation
Jan. 9	Sun.		#1" -- Lee Gallery.
Dec. 16	Thurs.		Mid-year graduation.
Dec. 16	Thurs.		Joint Army/Air Force Commissioning.
Dec. 16	Thurs.	12 noon	Clemson Tipoff Club, Clemson House.
Dec. 18	Sat.		Basketball - Clemson vs. Indiana State at Terre Haute, Ind.
Dec. 21	Tues.		Basketball - Clemson vs. Cincinnati at Cincinnati, Ohio.
Dec. 25	Sat.		Christmas.
Dec. 29-	Wed.-		Basketball - Poinsettia Classic at Greenville, S.C.
Dec. 30	Thurs.		
Jan. 1	Sat.		New Year's Day.
Jan. 3	Mon.		Orientation, new students.
Jan. 4	Tues.		Registration, all students.



PROCEDURES FOR SUBMITTING NEWSLETTER MATERIAL

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Vol. 11 No. 10

January 1, 1972

FACILITIES TO HONOR GUNNIN AND BARRE

The University Board of Trustees, on suggestions from the Committee on Names for Campus Buildings and Roads, has approved the naming of an existing campus facility and a proposed new building. The library in the College of Architecture is named the Emery A. Gunnin Architectural Library in honor of the late Emery A. Gunnin, former Professor of Architecture who served with distinction on Architectural faculty for more than 21 years. He died in May, 1971.

The proposed Agricultural Administration Building will be named Barre Hall in honor of the late Henry Walter Barre, former member of the faculty and Dean of the School of Agriculture who served the University with distinction for more than 27 years. He died in May, 1969.

In other action the Board:

(1) Approved the Clemson University Progressive Development Program, a continuing development program specifying a requirement of \$17,139,000 during the next 10-year period. Funds for the program will be obtained from gifts, grants and other sources.

(2) Endorsed and approved the action taken by the National Council of the Clemson Alumni Association and the Clemson University Foundation to accomplish the construction of the Alumni Center.

(3) Approved, effective May 1, 1972, the School of Nursing be designated the College of Nursing.

(4) Authorized the Administration to take such steps as necessary to obtain approval from the State Budget and Control Board to finance and construct additional housing facilities for single and married students, with a planned completion date of August, 1973.

(5) Approved the policy relating to terminal leave be amended to read as follows:

"A regular employee who is separated, regardless of the reason therefore, after completing six months of continuous employment, shall be paid in a lump sum supplement to his final regular payment, the value of annual leave accrued but not taken as of his final day at work; provided, that no such payment for unused annual leave shall exceed the value of the maximum number of days permitted by State Law; and provided further, that if payment to an employee for the total value of terminal leave in one fiscal year would result in total compensation in excess of the amount budgeted for him for that fiscal year, payment of the excess amount shall be deferred until the next fiscal year."

GROUP INSURANCE PREMIUM INCREASE ANNOUNCED BY SCSEA

The University Personnel Office has been notified that premium rates for group hospital-and-surgical insurance underwritten by Pilot Life Insurance Company for participating members of the S.C. State Employees' Association will be increased, effective February 1, 1972, as follows:

(a) The "Basic Package" (80 hospital days at \$27 per day; surgical expense up to \$320; supplementary accident expense; \$1000 life insurance) will cost \$10.76 per month (now \$8.10) for an individual, or \$24.70 (now \$18.24) for a family.

(b) The Hospital Indemnity Plan, an elective supplement which some employees have added to the "Basic Package" will cost \$2.07 per month (now \$1.50) for an individual under age 50, or \$3.45 (now \$2.50) for an individual over age 49, or \$6.21 (now \$4.50) for a family.

(Note: The increases described above have no effect on the "State Service Group Life Insurance Plan" nor the "Supplemental Life Insurance" offered earlier; nor do they affect any other group insurance plan for Clemson University employees.)

On similar occasions, in past years, an option was offered to SCSEA members to subscribe to a new program or to decline and keep an established program. According to SCSEA Headquarters, no option will be possible on February 1, 1972. The Association plans to write each insured member, individually, before that date, and explain the changes in detail. Individual members should wait for that letter before making decisions.

MINUTES OF MEETING OF UNIVERSITY AUDIO-VISUAL COMMITTEE, NOV. 4, 1971

The first meeting of the newly-created University Audio-Visual Committee was held in Room F-150, Plant and Animal Science Building, with J. F. Allen, T. E. Douglass, Harry Durham, Opal Hipps, M. W. Jutras, Sarah Walker, Samuel Wang and Betty P. Watkins present.

M. W. Jutras was elected chairman for 1971-72 and Harry Durham secretary.

Following discussion, the committee selected the first Wednesday of the month, 3:30-4:30 p.m., as the meeting time and decided to publish the approved minutes in the Clemson Newsletter.

The chairman and secretary were instructed to prepare a written statement of the committee's membership and duties for inclusion in the new faculty manual upon approval by the appropriate administrators. A motion to include as members both a male undergraduate student and a female undergraduate student, from different academic colleges or schools of the University was approved unanimously.

Then informal discussion of several areas of interest occurred with the following topics to be delved into more deeply in the future: (a) The University Library Committee's Ad Hoc Committee report on audio-visual materials, published in the November 1, 1971 University Newsletter; (b) The offering of such courses as Broadcasting, Photography; (c) The cataloging and/or centralizing of some audio-visual materials for University-wide use.

MINUTES OF MEETING OF UNIVERSITY AUDIO-VISUAL COMMITTEE, NOV. 4, 1971 Continued

The chairman asked Mr. Durham to discuss the proposed physical expansion plans for the Communications Center during the December meeting of the committee.

The next meeting will be Wednesday, December 1, 1971, 3:30 p.m. in Room 91 of the P&AS Building.

COMMITTEE APPOINTED TO RECOMMEND A NEW FACULTY EVALUATION FORM

There has been a need for some time to improve our faculty evaluation forms in such a manner that both faculty and administrators would be agreed that Clemson University was, indeed, using a form that would clearly accomplish its objectives.

To achieve this goal, Dr. Victor Hurst, Dean of the University, has appointed a committee to recommend a suitable faculty evaluation form. The committee consists of Dean Henry Vogel, chairman; Professor Douglas W. Bradbury, Dean Herbert Brantley, Professor Claire O. Caskey, Dr. James B. Copeland, Professor Arline Duvall, Dr. W. Cecil Godley, Professor Vernon S. Hodges, Dr. Morris A. King, and Dr. Thomas B. Yandle.

FELSBURG JOINS STUDENT RESIDENCE OFFICE STAFF

Lee Felsburg has joined the staff of the Residence Halls Office as a Residence Halls Manager. He received a B.S. degree in Social Science from Mansfield State College in 1966 and a M.Ed. degree in Student Personnel from the University of Georgia. During the period 1966-1970, he was employed by the Pennsylvania and New Jersey school systems as a teacher and basketball coach.

Felsburg, his wife, Elaine and daughter, Lynn reside at 34A Daniel Drive.

AGRICULTURAL ECONOMICS AND RURAL SOCIOLOGY

J. C. Hite (Assoc Prof) presented a paper entitled "Input-Output Methods in Rural Development Research," at a seminar on Quantitative Methods in Rural Development Research sponsored by the Southern Farm Management Research Committee in Atlanta, Nov. 18-19. c

J. M. Stepp (Alumni Prof) and J. C. Hite participated in a meeting of representatives of nine South Atlantic and Gulf Coast universities interested in coastal zone management problems in New Orleans, Nov. 30. The group is planning a coastal zone management seminar for late 1972.

CHEMICAL ENGINEERING

D. F. Bruley (Prof) has a publication with M.H. Knisely, H.I. Bicher, and D. D. Reneau, "Autoregulatory Phenomena Related to Cerebral Tissue Oxygenation," *Advances in Bioengineering, CEP Symposium Series, 114 Vol. 67, 195-201 (1971).*

C. E. Littlejohn (Prof and Hd) and W. B. Barlage (Prof) attended the 64th Annual Meeting of the American Institute of Chemical Engineers, San Francisco, Calif., Nov. 28 - Dec. 1.

F. C. Alley (Prof) has been selected for membership on the State Chamber of Commerce Technical Committee.

The Chemical Engineering Department has received an unrestricted gift of \$2,000 from Dow Chemical USA for 1972-73.

CHEMISTRY

Recent publication of A. R. Pinder (Prof) and E. Leete: "Biogenesis of Dioscorine," Chem. Communications, 1499 (1971).

COLLEGE OF ENGINEERING - CONTINUING ENGINEERING EDUCATION

A seminar on "Digital Process Control Systems" will be presented by the Department of Electrical and Computer Engineering at Clemson House on Monday, January 10, 1972.

Appearing on the program will be D. C. Amoss (Asst Prof), T. L. Drake (Assoc Prof), B. E. Gilliland (Assoc Prof) and T. J. Williams, Director, Laboratory for Applied Industrial Control, Purdue University, Lafayette, Indiana. Dr. Gilliland will also moderate the seminar.

Additional details may be obtained from Professor R. A. Banister, Director, Continuing Education, College of Engineering, 116 Riggs Hall.

ELECTRICAL AND COMPUTER ENGINEERING

Carl W. Malstrom (Instr) was elected at the annual meeting in November in connection with the fall joint Computer Conference, as member-at-large to serve for the coming year on the five-man National Executive Committee and the Board of Directors of the Technical Society Simulation Council, Inc. (SCi). SCi is a National Technical Society serving the computer simulation community. This is Mr. Malstrom's fourth year as a member of the SCi governing bodies.

ENVIRONMENTAL SYSTEMS ENGINEERING

Who is Responsible for Clean Water? This was the theme of an environmental control workshop for municipal and county officials held on Dec. 9 in Florence. The workshop was sponsored by the Environmental Systems Engineering Department as part of a grant under Title I of the Higher Education Act of 1965 and the Public Services Career Program of the Environmental Protection Agency. John H. Austin (Prof) and Dana W. Love (Consultant) assisted with the workshop.

B. L. Edge (Asst Prof) represented the Water Resources Institute at a workshop of the Marine Activities of the Coastal Plains Region Southeastern U. S. on Dec. 7-9. This workshop was sponsored by Coastal Plains Center for Marine Development Services.

J. F. Andrews (Prof and Hd) presented a seminar on "Dynamic Models of Wastewater Treatment Processes" to Chemical Engineering faculty and students at the University of Kentucky, Dec. 7.

J. F. Andrews attended the South Carolina Pollution Control Authority meeting in Columbia, Dec. 8. Dr. Andrews was recently appointed to the Authority.

The Environmental Systems Engineering faculty in cooperation with the Chemical Engineering faculty, participated in the Seventh Annual Seminar on Air and Water Pollution Control held on campus, Dec. 9-10. A. R. Abernathy (Assoc Prof) served as co-chairman of the seminar.

HORTICULTURE

T. L. Senn (Prof and Hd) attended the International Seaweed Symposium on "Physiologically Active Compounds from Marine Organisms" at St. Petersburg, Fla., Nov. 18 and presented a paper entitled "Biological Activity Exhibited by Seaweed Extracts."

G. E. Stembridge (Assoc Prof), C. E. Gambrell, Jr. (Asst Horticulturist), R. J. Ferree (Prin Ext Spec) and J. D. Ridley (Asst Ext Area Agent) attended the Cumberland-Shenandoah Fruit Workers Conference in Winchester, Va. on Nov. 18-19. G. E. Stembridge presented research reports entitled "Effects of Growth Regulators on Apple Shape" and "Peach Maturity as Influenced by Date of Ethephon Application." C. E. Gambrell, Jr. presented a report entitled "Chemical Thinning of Peaches in South Carolina."

MICROBIOLOGY

Ann W. Baxter (Assoc Prof) has been elected to the office of Councilor-at-Large to the American Society for Microbiology. She will hold this position until May 1973.

MICROBIOLOGY Continued

An article, "A Student Chapter in South Carolina," written by Ann W. Baxter (Assoc Prof) appeared in ASM News, Vol. 37, no. 3, a publication of the American Society for Microbiology. The article describes the development of the student microbiology club at Clemson, and how it became the first student organization to be an affiliate of the American Society for Microbiology.

Rufus K. Guthrie (Assoc Dean and Prof) has published "Serological Analysis of Morphologically and Biochemically Similar Streptomyces Species," in Applied Microbiology, Vol. 21, 1971. Co-authors were I. Kocsis and C. B. Lassiter (North Texas State University).

Rufus K. Guthrie was one of three Clemson Professors to be listed in "Two Thousand Men of Achievement, 1971," published by Melrose Press.

J. H. Bond (Assoc Prof) has been elected Vice-President of the South Carolina Branch of the American Society for Microbiology for the year 1971-72.

M. J. B. Paynter (Assoc Prof and Hd) and F. M. DeWork (Grad Stu) presented a paper entitled, "Continuous Cultivation of Methanogenic Bacteria," at the 162nd National Meeting of the American Chemical Society in Washington, D. C.

M. J. B. Paynter and H. R. Bungay III (Prof, Inter Studies) have published a paper entitled, "The Effect of Microbial Interactions on Performance of Waste Treatment Processes," in "Biological Waste Treatment," a biotechnology and bioengineering symposium volume.

M. J. B. Paynter presided at the fall meeting of the South Carolina branch of the American Society for Microbiology held in Charleston on Nov. 19.

PLANT PATHOLOGY AND PHYSIOLOGY

Ralph E. Saunders presented a paper entitled "Ouchterlony agar diffusion detection of alfalfa mosaic virus" on Nov. 19 at the S. C. Branch American Society for Microbiology, Charleston. (O. W. Barnett was the senior author).

ZOOLOGY

William Bachop (Asst Prof) attended the American Society for Cell Biology meeting in New Orleans, Nov. 17-20 to present a paper on induction of mutations in yeast by a drug related to quinine.

CALENDAR OF CAMPUS EVENTS

Jan.	1	Sat.		New Year's Day.
Jan.	3	Mon.		Orientation, new students.
Jan.	4	Tues.		Registration, all students.
Jan.	5	Wed.		Late registration.
Jan.	5	Wed.		Basketball - freshmen & varsity - Clemson vs. Georgia Tech at Atlanta, Ga.
Jan.	6	Thurs.		Classes begin, regular schedule.
Jan.	6	Thurs.	12 noon	Clemson Tipoff Club, Clemson House.
Jan.	8	Sat.	8:00 p.m.	Basketball - Clemson varsity vs. Maryland; freshmen vs. Gaston Jr. College.
Jan.	8-	Sat.-		MTSU Junior Tournament, Middle Tennessee State University, Murfreesboro, Tennessee -- Clemson Debaters.
Jan.	9	Sun.		
Jan.	10	Mon.	7:00 p.m.	Foreign film, <u>The Cow and I</u> (French) - Daniel Hall Theatre -- free.
Jan.	10	Mon.		Seminar, Continuing Engineering Education - "Digital Process Control Systems" (E & CE).
Jan.	11-	Tues.-		Annual Dairy Science Conference - Clemson House.
Jan.	12	Wed.		
Jan.	11	Tues.		Swimming - Augusta.
Jan.	12	Wed.		Last day for registration.
Jan.	12	Wed.	8:00 p.m.	Basketball - Clemson vs. North Carolina.
Jan.	14-	Fri.		Architectural Exhibit - "The South Carolina Arts Commission Collection" - Lee Hall Gallery.
Feb.	6	Sun.		
Jan.	15	Sat.		Basketball - Clemson vs. Duke at Durham, N.C.
Jan.	15	Sat.		Graduate Record Exam.
Jan.	15	Sat.		Swimming - Appalachian State.
Jan.	15-	Sat.-		Clemson Debaters - Gulf Coast Invitational Forensics Tournament - Gulf Coast Community College, Panama City, Florida.
Jan.	16	Sun.		

PROCEDURES FOR SUBMITTING NEWSLETTER MATERIAL

All Calendar items of campus events (speakers, films, meetings, seminars, sporting events, etc.) should be submitted by written memorandum directly to the Office of Public Relations, Trustee House. Information and news items from the Office of the President, Vice President for Business and Finance, Vice President for Executive Affairs, Vice President for Student Affairs and the Vice President for Development should be submitted by written memorandum to the Office of Public Relations, Trustee House. Information and news items from all areas under the Vice President for Academic Affairs should be submitted by written memorandum to Dr. Claud B. Green, Room 28, Tillman Hall.

The following deadlines prevail: Items to appear in the Newsletter published the 1st of each month must be submitted by the 20th of the previous month; items to appear in the Newsletter published the 15th of each month must be submitted by the 5th of each month.

CLEMSON

CLEMSON
SOUTH CAROLINA ROOM

JAN 12 1972

NEWSLETTER

INFORMATION FOR THE STAFF OF CLEMSON UNIVERSITY

Vol. 11 No. 11

January 15, 1972

SPECIAL ADVISORY COMMITTEE ON LABORATORY WELFARE APPOINTED

The National Institutes of Health (NIH) has recently required the University to file an "assurance of compliance" with NIH governing the care of laboratory animals. During a meeting of representatives of all University animal facilities it was agreed that compliance should be effected by means of the recommendations of a Special Advisory Committee on Laboratory Welfare.

The committee, appointed by Dr. Victor Hurst, Vice President for Academic Affairs and Dean of the University, consists of Dr. R. W. Henningson, Assistant Dean of University Research, Chairman, ex officio; Dr. S. L. Moore, Assistant State Veterinarian; Dr. B. W. Sauer, Assistant Professor of Bioengineering; Dr. R. F. Borgman, Associate Professor of Food Science; and Dr. S. A. Gauthreaux, Assistant Professor of Zoology.

NEW FACULTY APPOINTMENTS

Effective January 1, 1972, 79 persons who have been serving the Clemson University Cooperative Extension Service will be granted faculty rank. Rank has been awarded commensurate with academic background, relevant experience, and past performance. Their names, administrative position when appropriate, rank, area of subject matter proficiency, academic degrees, and colleges and universities attended follows:

COLLEGE OF AGRICULTURAL SCIENCES

Ackerman, Carl W., Associate Professor of Animal Science; B.S., M.S. Clemson University

Albrecht, John E., Assistant Professor of Animal Science; B.S., Delaware Valley College, M.S., Ph.D., North Carolina State University

COLLEGE OF AGRICULTURAL SCIENCES (Continued)

Allen, Leonard R., Associate Professor of Agronomy and Soils; B.S., Clemson University; M.S., Ph.D., Auburn University

Baker, George H., State Leader, 4-H and Youth Development Programs and Assistant Professor of Agronomy and Soils; B.S., Clemson University

Baumgardner, Reginald A., Associate Professor of Horticulture; B.S., Clemson University; M.S., Ph.D., University of Maryland

Beasley, Lynn W., Instructor in Agricultural Economics and Rural Sociology; B.S., Louisiana Tech; M.S., Louisiana State University

Benton, Don A., Assistant Professor of Agronomy and Soils; B.S., Clemson University

Berry, Elizabeth B., Associate District Extension Leader and Assistant Professor of Home Economics; B.S., Winthrop College

Brown, Ralph T., Jr., Instructor in Agricultural Economics and Rural Sociology; B.A., Juris Doctor, Washington and Lee University

Carmack, Veronica D., Assistant Professor of Home Economics; B.S., University of Kentucky; M.S., University of Tennessee

Carroll, Adger B., State Leader, Extension Community and Resource Development Programs and Professor of Agricultural Economics and Rural Sociology; B.S., M.S., Clemson University; Ph.D., North Carolina State University

Cato, Lewis F., Assistant Professor of Animal Science; B.S., M.S., Clemson University

Clinkscales, William C., State 4-H and Youth Development Coordinator and Instructor in Agricultural Education; B.S., South Carolina State College

Copeland, Jimmy B., Associate Director and Professor of Agricultural Economics and Rural Sociology; B.S.A., University of Georgia; M.S., Clemson University; Ph.D., University of Wisconsin

Cook, Wilton P., Instructor in Horticulture; B.S., Clemson University; M.S., University of Florida

Craven, Ruby M., State Leader, Extension Home Economics Programs and Professor of Home Economics; B.S., Winthrop College; M.S., University of Tennessee; Ph.D., University of Wisconsin

COLLEGE OF AGRICULTURAL SCIENCES (Continued)

Cunningham, Bennie L., State Leader, Extension Special Programs and Associate Professor of Agricultural Education; B.S., M.S., South Carolina State College

Davis, Rose J., Assistant Professor of Home Economics; B.S., M.S., Winthrop College

Ezell, Danny O., Associate Professor of Horticulture; B.S., M.S., Clemson University; Ph.D., University of Florida

Fearrington, Doris B., Assistant Professor of Home Economics; B.S., Winthrop College; M.S., Simmons College and Harvard School of Public Health

Ferree, Roy J., Associate Professor of Horticulture; B.S., Clemson University; M.S., Rutgers University

Funchess, William H., District Extension Leader and Associate Professor of Agronomy and Soils; B.S., M.S., Clemson University

Golden, Willie I., State Leader, Extension Agricultural Programs and Professor of Agricultural Economics and Rural Sociology; B.S., M.S., University of Georgia; Ph.D., Texas A&M University

Gramling, George E., Assistant Professor of Dairy Science; B.S., M.S., Ph.D., University of Wisconsin

Griffin, Barbara J., Instructor in Agricultural Engineering; B.A., Winthrop College; M.A., Syracuse University

Harvey, Lawrence H., Associate Professor of Agronomy and Soils; B.S.A., M.S., Ph.D., University of Georgia

Hedden, Frank H., Associate Professor of Agricultural Engineering; B.S., Clemson University; M.S., University of Georgia

Hindman, Marie S., Associate Professor of Home Economics; B.S., Winthrop College; M.S., University of Tennessee

Holahan, Ursula A., Associate Professor of Home Economics; B.S., Cornell University; M.S., University of Minnesota

Holleman, Kendrick A., Associate Professor of Poultry Science; B.S., Texas A&M University; M.S., University of Nebraska; Ph.D., University of Missouri

Howell, Nelda K., Associate District Extension Leader and Assistant Professor of Home Economics; B.S., East Carolina University; M.Ed., North Carolina State University

COLLEGE OF AGRICULTURAL SCIENCES (Continued)

Hudson, Larry W., Assistant Professor of Animal Science; B.S., Berea College; M.S., Ph.D., University of Kentucky

Hughes, Buddy L., Assistant Professor of Poultry Science; B.S., Clemson University; M.S., Ph.D., Oregon State University

Jones, Emory V., Instructor in Horticulture; B.S., M.S., Clemson University

Jones, Joe K., District Extension Leader and Assistant Professor of Animal Science; B.S., Clemson University

Jordan, Johnny W., Instructor in Agricultural Economics and Rural Sociology; B.S., M.S., Auburn University

King, John C., Instructor in Dairy Science; B.S., Clemson University

Kissam, John B., Associate Professor of Entomology and Economic Zoology; B.S., M.S., Ph.D., Clemson University

Knox, Sarah S., Associate District Extension Leader and Associate Professor of Home Economics; B.S., Winthrop College

Liebenrood, George H., District Extension Leader and Associate Professor of Animal Science; B.S., Clemson University; M.Ed., Colorado State University

Lloyd, Ollie W., Instructor in Agricultural Economics and Rural Sociology; B.S., M.S., Clemson University

Long, Thomas M., Jr., Instructor in Agricultural Economics and Rural Sociology; B.S., M.S., Auburn University

Lynn, Herman P., Associate Professor of Agricultural Engineering; B.S., M.S., Clemson University

McKenzie, Martin C., Associate Professor of Agricultural Engineering; B.S., Clemson University

McLemore, Dan L., Assistant Professor of Agricultural Economics and Rural Sociology; B.A., Presbyterian College; M.S., Ph.D., Clemson University

Miller, Landon C., Assistant Professor of Horticulture; B.S., Clemson University; M.S., Virginia Polytechnic Institute; Ph.D., Auburn University

Miller, Robert W., Jr., Assistant Professor of Plant Pathology and Physiology; B.S., University of Delaware; M.S., University of Arizona; Ph.D., University of Delaware

COLLEGE OF AGRICULTURAL SCIENCES (Continued)

Mizelle, William O., Jr., Instructor in Agricultural Economics and Rural Sociology; B.S., M.S., North Carolina State University

Nettles, William C., Associate Professor of Entomology and Economic Zoology; B.S., Clemson University; M.S., Ohio State University

Nolan, Clifford N., Professor of Agronomy and Soils; B.S., University of Florida; M.S., University of Georgia; Ph.D., University of Florida

Northern, William L., Professor of Dairy Science; B.S., North Carolina State University; M.Ag., West Virginia University; Ph.D., University of Minnesota

O'Dell, Wayne T., Director and Professor of Dairy Science; B.S., M.S., Clemson University; Ph.D., Pennsylvania State University

Padgett, Adrian L., Assistant Professor of Agricultural Economics and Rural Sociology; B.S., M.S., Clemson University

Palmer, James H., Assistant Professor of Agronomy and Soils; B.S., Clemson University; M.S., University of Georgia; Ph.D., Clemson University

Parks, Clyde L., Associate Professor of Agronomy and Soils; B.S., Tennessee Tech; M.S., Auburn University; Ph.D., Texas A&M University

Pittman, Jerold F., Professor of Agricultural Economics and Rural Sociology; B.S., M.S., Clemson University; Ph.D., North Carolina State University

Privette, Charles V., Instructor in Agricultural Engineering; B.S., M.S., Clemson University

Reeves, Calvin B., Assistant Professor of Dairy Science; B.S., Oklahoma A&M; M.S., Ohio State University

Richardson, Eleanor J., State 4-H and Youth Development Coordinator and Instructor in Home Economics; B.S., M.S., Auburn University

Risher, Charles F., Assistant Professor of Poultry Science; B.S., Clemson University

Roberson, Georgia T., State 4-H and Youth Development Coordinator and Assistant Professor of Home Economics; B.S., Winthrop College; M.Ed., University of Maryland

COLLEGE OF AGRICULTURAL SCIENCES (Continued)

Rochester, Morgan C., Professor of Agricultural Economics and Rural Sociology; B.S., Clemson University; M.S., University of Florida; Ph.D., University of Wisconsin

Siedschlag, Everett W., Instructor in Agricultural Economics and Rural Sociology; B.S., University of Illinois

Smith, Fred H., Associate Professor of Plant Pathology and Physiology; B.S.A., M.S.A., Ph.D., University of Georgia

Sparks, LeGrand M., Assistant Professor of Entomology and Economic Zoology; B.S., M.S., Clemson University

Spiers, Judith E., Instructor in Home Economics; B.S., Winthrop College; M.S., University of Tennessee

Stephens, Robert L., Instructor in Agronomy and Soils; B.S., M.S., Clemson University

Sutherland, Milford H., Instructor in Agricultural Economics and Rural Sociology; B.S., M.S., Clemson University

Taylor, Julia B., Associate Professor of Home Economics; B.S., Winthrop College; M.S., University of Tennessee

Thomas, Charles A., Associate Professor of Entomology and Economic Zoology; B.S., M.S., Clemson University; Ph.D., University of Tennessee

Walker, Walter S., Associate Professor of Poultry Science; B.S., Clemson University; M.Ed., University of South Carolina

Welter, John F., Assistant Professor of Poultry Science; B.S., M.S., Clemson University

Williamon, Paul S., Associate Professor of Agricultural Economics and Rural Sociology; B.S., M.S., Clemson University

Williams, John B., District 4-H and Youth Development Coordinator and Assistant Professor of Agricultural Education; B.S., Clemson University

Williams, John N., Professor of Animal Science; B.S., Alabama Polytechnic Institute; M.S., Mississippi State University; Ph.D., University of Tennessee

Wise, John F., Assistant Professor of Animal Science; B.S., M.S., Clemson University

COLLEGE OF FOREST AND RECREATION RESOURCES

Barker, William J., Associate Professor of Forestry; B.S., North Carolina State University

Kessler, George D., Assistant Professor of Forestry; A.A., Cornell University; B.S., M.S., Ph.D., University of Georgia

Marbut, Samuel A., Assistant Professor of Forestry; B.S., University of Georgia

MINUTES OF THE MEETING OF THE FACULTY SENATE, NOVEMBER 9, 1971

The meeting was called to order by President Sawyer at 4:15 P.M. The minutes of the previous regular and special meetings were approved with the following changes: addition of the word "to" to precede the word "read" in item #14 of the minutes of October 19; and, in the minutes of October 12, modification of the resolution concerning comparative benefits of SCRC and TIAA/CREF to read:

Whereas the report of the Self-Study Committee on the Faculty suggests:

- a. the South Carolina Retirement System (SCRS) is not competitive with other state retirement systems with respect to faculty of institutions of higher education;
- b. that the nonportability of the SCRS is a most unattractive feature of SCRS for the faculty of Clemson University; and
- c. that faculty members of Clemson University could realize a substantially better retirement income with a smaller burden on the South Carolina taxpayer by transferring their retirement account to TIAA-CREF;

Be it therefore resolved that:

There be immediately established a joint faculty-administration committee to investigate the present retirement structure in comparison with possible alternatives, with particular emphasis on the plan offered by TIAA/CREF now available to teachers in many institutions with which Clemson University hopes to remain competitive. Should the findings of the committee accord with the findings of the Clemson University Self-Study Committee on the Faculty, the Committee will explore possible avenues of appropriate action to make available an alternative retirement plan for the faculty.

President Sawyer reported that she, along with several members of the Senate, as representatives of the faculty, had met with the Self-Study Visitation Team. She also reported that Mr. Stan Nicholas, Vice President for Development, has requested to come before the Senate to present information about the location of the proposed Alumni Building as well as the status of the Student Union. The Senate

MINUTES OF THE MEETING OF THE FACULTY SENATE, NOVEMBER 9, 1971 (Continued)

approved a motion to invite Mr. Nicholas to the January meeting of the Senate and suggested that items of concern be presented to Mr. Nicholas prior to that meeting. Two items specifically mentioned were progress on the renovation of Pike Field House, and Clemson's obligation to ARA-Slater Food Services.

President Sawyer reported on the status of previous resolutions approved by the Senate. With regard to the request for traffic control devices on campus, a highway safety engineer will examine conditions on campus and report his findings. The administrative response to the resolution passed by the Senate requesting establishment of a joint faculty-administration committee to investigate Clemson's retirement system is as follows: the administration agrees that such a committee should be formed but requests that it be delayed pending recommendations from the Self-Study Visitation Team and the Commission on Higher Education. The Senate expressed a preference to wait only for recommendations from the Self-Study Visitation Team, the feeling being that this would enable a stronger recommendation to be made to the Commission on Higher Education. President Sawyer also reported that there are administrative plans for the development of a new faculty evaluation form by a committee which will have faculty and administration representation.

Professor V. S. Hodges was pleased to report that, as the Senate's representative he had been invited to inspect facilities at Fort Gordon, where he observed impressive and informative demonstrations.

With regard to the administrative response to the Senate's suggested changes in the faculty manual, Professor W. E. Castro moved to accept the administration's current statement on annual leave as it stands, and to try to work through other routes to effect a change in the annual leave policy. This was seconded by Professor V. S. Hodges and passed by a vote of 25 to 4.

In order to facilitate an agreement on other items from the faculty manual which are still at issue, Professor Keller moved that the Senate request a conference committee be formed, with equal representation from the faculty and administration, for the purpose of arbitrating the issues. The motion carried. The Senate unanimously agreed, in the form of an approved motion, that the composition of the Senate portion of the committee be left to the discretion of President Sawyer. President Sawyer requested from Senators new ideas on outstanding issues with regard to the above request. A motion from the floor to consider the makeup of faculty representation on the Graduate Council passed by a vote of 15 to 14. A second motion to refer the matter to the proposed conference committee carried.

There were no reports from the Policy Committee or the Admissions and Scholarship Committee.

MINUTES OF THE MEETING OF THE FACULTY SENATE, NOVEMBER 9, 1971 (Continued)

Professor W. E. Castro reported for the Welfare Committee that there would be a report ready for the Senate's December meeting on the portion of the faculty manual dealing with faculty participation in the selection of academic administrators; he requested specific suggestions from senators on the matter. Professor Castro pointed out two items of interest on the legislative program for 1972, presented by the South Carolina Employees' Association: the employer's contribution to medical care insurance, and a change in retirement law to allow a dependent to receive the state's share in the event of the death of an employee who is 60 years old or who has 20 years of creditable service. Professor Castro also mentioned that there may be alternatives to the present Blue Cross-Blue Shield Group Insurance for faculty, which makes the faculty member buy both hospitalization and major medical coverage, and which prevents his belonging, as part of a group, to a plan from an alternative company, Blue Cross having an exclusive contract on the campus. The Senate voted to have the Welfare Committee investigate the comparative benefits of the present Blue Cross-Blue Shield coverage and other alternatives.

Professor N. D. Camper reported for the Research Committee. Still under consideration are the indirect costs of grants. Professor Camper also informed the Senate that Clemson University is currently represented in Washington, D.C. by a public relations consultant; at one time Clemson utilized the services of the office of Federal Progress, which supplied information pertaining to granting agencies. This is being examined by his committee as are the matters of attendance at professional meetings and a revised system of faculty evaluation, which would take into account all the efforts of the faculty member in order to give a more accurate evaluation.

Professor J. D. Fulton, Chairman of Ad Hoc Committee A, asked for comments and suggestions on a letter, copies of which were sent to senators along with the committee's report, which would go to all faculty concerning the proposed club facility in the Clemson House.

Professor M. D. Sherrill reported that Ad Hoc Committee B, on the book ordering procedures, had met twice and at the second meeting Mr. John Cureton, manager of the Clemson Book Store, had been present.

As the first item of new business, Professor J. C. Fanning moved the adoption of a resolution concerning the Master Plan of Clemson University which reads as follows:

Be it resolved that the Faculty Senate establish an informal investigating committee to study the Master Plan of Clemson University and report to the Senate, giving recommendations for action, at the March meeting.

MINUTES OF THE MEETING OF THE FACULTY SENATE, NOVEMBER 9, 1971 (Continued)

This committee would be an interim step before approval of the newly recommended Planning Council, which has faculty representation. The motion passed unanimously.

Professor F. J. Keller presented and moved the adoption of a resolution based on the commonly accepted guidelines for equating credit with the amount of work required for a course. The guideline was described as follows:

One semester hour credit of a course not designated solely to prepare students for college courses should entail approximately three hours of work per week throughout an academic semester by the average, conscientious undergraduate student, each recitation period in any week entailing two hours of outside class work for one semester hour credit, each two hour laboratory period in any week entailing one hour of outside laboratory work for one semester hour credit, and each three hour laboratory period in any week entailing no outside laboratory work for one semester hour credit.

The resolution read:

RESOLVED that the University include the guideline in the Credit System section of Part IV - Scholastic Regulations, page 116 of the Clemson University Announcements.

Be it further RESOLVED that in each academic department of the University where there is regular departure from the guideline in scheduling of weekly recitation meetings or laboratory meetings of courses, action should be initiated by departmental representatives in curriculum committees of the University which will lead to the scheduling of all University courses in compliance with the guidelines.

The motion carried.

For the Admissions and Scholarship Committee, Professor Keller then moved that the following paragraph be substituted for the present first paragraph (page 119) of Scholastic Regulations in the 1971 Clemson University Announcements:

In the case of a Freshman or Sophomore who reschedules courses that were passed or failed in his first semester (and/or during the summer session(s) prior to this first semester, for a student who first enters during the summer), the student's grade-point ratio will be corrected to reflect only the grade obtained in the rescheduled course(s). Should a course be discontinued, the student may take another similar course for the purpose of raising his grade-point ratio in this fashion. The department which offered the discontinued course shall decide the course that the student may use for this purpose. This policy does not apply to transfer students.

MINUTES OF THE MEETING OF THE FACULTY SENATE, NOVEMBER 9, 1971 (Continued)

The paragraph would replace the present "Forgivable F" with a "Forgivable Grade," but only in cases where a student retook the entire course. It also takes into account discontinued courses, a matter not considered in the original Senate motion. The motion carried.

Professor Keller then moved a change in the second sentence on the same page of the Announcements under the heading of "Minimum Requirements for Continuing Enrollment":

At that time in order to be able to continue his enrollment, a student who has received grades in courses totalling:

(a) 1 to 23 credit hours and has been enrolled at least two semesters at Clemson must have a cumulative grade-point ratio of 1.00 or above. The subsequent items (now lettered a, b, and c) are to be appropriately relettered.

This motion also carried.

The meeting was adjourned at 6:20 p.m.

Absent: J. C. Mullins

NOTICE TO GRADUATE STUDENTS AND ADVISORS

The deadline for filing application for admission to candidacy for May 5, 1972 graduation is January 19, 1972. Form GS4 may be obtained in the Graduate Office, Room 17, Tillman Hall. It would be appreciated if all faculty advisors would bring this deadline to the attention of graduate students who expect to receive their degree this May.

AGRICULTURAL EDUCATION

E. T. Carpenter (Prof and Hd) and J. A. Hash (Assoc Prof) participated in the 65th annual convention of the American Vocational Association at Portland, Oregon, Dec. 3-8. Dr. Carpenter chaired the first general session of the American Association of Teacher Educators in Agriculture; he was officially installed as 1972 President of this group at the conclusion of the annual business meeting. Dr. Hash represented Region V on the National Curriculum Materials Committee and attended the sectional meetings of the American Vocational Education Research Association. L. H. Davis (former Prof and Hd) delivered the 1971 AATEA Distinguished Lecture at the annual breakfast meeting. Total attendance was 594 in the Agricultural Education Division and included teachers, teacher educators, supervisors and guests from 44 states.

GRADUATE COUNCIL MINUTES, DECEMBER 10, 1971

The Graduate Council met on December 10, 1971 at 3:30 p.m. and was called to order by Dean Schwartz. Members present were: Dr. Smith, Dr. Wolf, Dr. Camper, Dr. Freeze, Dr. Graben, Prof. Means, Dr. Bolen, Dr. Allen, Mr. Mims, and Mr. Bostic.

The minutes of the November 12, 1971 meeting were approved as distributed.

The list of candidates for December 16, 1971 graduation was distributed to the Council for approval. Dean Schwartz stated that each department had been consulted regarding deletion of candidates. A motion was made for the approval of these candidates to receive their degrees at the December 16, 1971 graduation and passed unanimously.

The following courses were approved:

In Ed 610	Special Institute Course: Topics in Industrial Education
In Ed 614	Electronics for Teachers
Hist 719	United States History Since 1900

The following course was tabled:

Gen 601	Genetics
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It was suggested that the Science Teaching Committee be contacted regarding Genetics 601 and that it be reconsidered at the January meeting.

A subcommittee consisting of Dr. Graben, chairman, Dr. Bolen, Mr. Mims, and Dr. Camper was appointed to study the proposal entitled Master of Nutritional Sciences submitted by the College of Agricultural Sciences.

Dean Schwartz then discussed the matter of graduate student requirements for enrollment. The Graduate Council set up a policy last spring requiring all graduate students receiving financial assistance to sign up for a specified number of credit hours - those in the masters programs nine credit hours and those in the Ph.D. programs six credit hours. It has been noted that some had failed to comply with this requirement. After some discussion, Dean Schwartz stated there would be a complete and thorough check on each student who failed to comply and the matter would then be handled through the proper channels.

The Council passed the following resolution and requested its chairman to forward it to the Faculty Senate.

WHEREAS the Graduate Council is a University wide representative of academic thought, and

WHEREAS the actions of the Graduate Council should be non partisan with respect to academic areas, and

GRADUATE COUNCIL MINUTES, DECEMBER 10, 1971 (Continued)

WHEREAS all academic areas of the University offering graduate work should have a voice in University decisions affecting graduate programs, and

WHEREAS student representation must be accompanied by full participation in Graduate Council actions:

BE IT RESOLVED that the present structure of the Graduate Council be upheld; that is, one faculty representative per college offering graduate work and two graduate student representatives with full voting rights.

The full membership of the Graduate Council has considered this resolution and has unanimously voted approval.

Dr. Bolen made a motion to adjourn, the motion was seconded and carried.

MINUTES OF MEETING OF UNIVERSITY LIBRARY COMMITTEE, NOVEMBER 30, 1971

Present: M. W. Jutras (Chairman), W. C. Bachop, Ralph Knowland, David Rowe (Student Senate), M. D. Sherrill, D. B. Stafford, J. M. Wannamaker, J. W. G. Gourlay (Secretary).

1. Minutes of meeting of November 2, 1971, were approved.
2. Sub-committee Report on Use of the Library by Faculty. Mrs. Galloway, Chairman.

Dr. Jutras distributed a report which had been turned in by Elizabeth B. Galloway. A questionnaire had been sent to 112 faculty members, inquiring why so many faculty members do not use the library - only 38 responded. List of faculty queried by questionnaire had been selected by the computer. All favorable replies had been eliminated by Mrs. Galloway before report was turned in to Dr. Jutras.

The Questionnaire:

Covering statement - Indications are that faculty members do not use the library as frequently and effectively as they should. As a member of the committee to study the reasons why so many faculty members fail to use the library, I am interested in (1) why you, personally, do not use the library as often as you might, and (2) why you feel other faculty members fail to use the library.

UNIVERSITY LIBRARY COMMITTEE MEETING MINUTES, NOVEMBER 30, 1971 (Continued)Response:

The following reasons were given for non-use of library: been disturbed by recent changes which have made the library less convenient, i.e., patent files moved to basement where they are inconvenient while old file of New York Times are kept on main floor; the current scientific journals are now arranged by a library coding system instead of alphabetically as it was before, making it very difficult to find or replace a set of such journals; use departmental library which has most of the specialized books and journals needed and is more convenient; use library occasionally for general topics; too much microfilm used and too hard to read; lack of time; too much work to do; takes too long to order books; takes too long to get books put on reserve; too far to walk; extensive personal libraries; too inconvenient to park (suggest 30-45-60 min. parking spaces); have personal journal subscription or receive journals through professional memberships; needed resource data is not from library resources; lack of professional motivation; failure to realize the value; noisy faculty study room; lacks both the physical facilities and source materials necessary to do research in many areas of the Social Sciences and Humanities; use library through students; have not acquired sufficient back files of important journals; limited hours library is opened; distracted by students sleeping or lying on furniture; unable to get desired books (not available); lack of simple clearcut directions posted in many places in the library giving location of books numbered by the proper categories, etc.; locating references is far too cumbersome and time consuming.

3. The Library Committee expressed by vote its appreciation of the University Administration's increase in funds for book and periodical purchases this year. Mr. Gourlay remarked that over the past several years, support of the book and periodical budget had increased by 500% and the overall support of the library by 535%.
4. Discussion of the distribution of the Periodical and Continuation Titles and the Recent Acquisition list indicated that the consensus was to continue to make distribution to all faculty members.
5. There was some discussion concerning the necessity for each department to examine the library collections and remove items that were outdated and giving misinformation. Dr. Jutras indicated that this item would be considered at a future meeting of the Library Committee.
6. Mr. Gourlay indicated that the library policy developed by the University Library Committee was being implemented in that faculty members who had not returned books were being sent letters indicating the titles overdue.
7. Time of next meeting - January 4, 1972 at 3:30 P.M.

AGRICULTURAL ENGINEERING

T. H. Garner (Prof) presented a paper entitled "Scheduling Cotton Defoliation and Harvest with Environmental Histories" co-authored by David G. Dickson (Res Asst) at the 1971 annual winter meeting of the American Society of Agricultural Engineers held in Chicago, Ill., Dec. 7-10.

B.K. Webb (Assoc Prof) presented a paper entitled "Development of a Unitary Tractor-Mounted Apple Harvester" co-authored by C. M. McHugh (Assoc Prof, Eng Serv) and C. E. Hood (Assoc Prof) at the 1971 annual winter meeting of the American Society of Agricultural Engineers held in Chicago, Dec. 7-10.

C. L. Barth (Assoc Prof) presented a paper entitled "Identifying Odorous Components of Stored Dairy Manure" at the 1971 annual winter meeting of the American Society of Agricultural Engineers held in Chicago, Dec. 7-10; he also presided at a session on "Regulations on Livestock Wastes."

J. R. Lambert (Assoc Prof) participated in the Session on Biological Simulation at the 1971 annual winter meeting of the American Society of Agricultural Engineers held in Chicago, Dec. 7-10; accepted an invitation to join the Computers Committee of ASAE; agreed to help plan a future program on the application of software packages to agricultural engineering problems; and conferred with the other members of a committee planning a meeting of the biological systems simulation group to be held in Clemson in the spring.

A. W. Snell (Prof and Hd) served as reporter for a session at the Department Heads Management Workshop and participated as a member of the Board of Directors of the American Society of Agricultural Engineers as Regional Director from the Southeast Region held in conjunction with the 1971 annual winter meeting of the American Society of Agricultural Engineers held in Chicago, Dec. 7-10.

CHEMISTRY

Recent publications: "trans-3-Penten-2-One," by H. C. Odom (Grad Stu) and A. R. Pinder (Prof), Organic Syntheses, 51, 115 (1971).

"Total Synthesis of Racemic Fukinone and of Natural (+)-Hydroxyeremophilone," by A. R. Pinder and A. K. Torrence (Grad Stu), Journal of the Chemical Society, 3410, (1971).

COLLEGE OF ENGINEERING

S. F. Hulbert (Assoc Dean) appeared on the TV show "Today in Carolina" on Dec. 31. He was a member of a panel which was asked to forecast what life would be like during the next decade.

COLLEGE OF ARCHITECTURE

Clarence L.B. Addison (Instr) participated in the 1971 ACSA (Association of Collegiate Schools of Architecture) Teachers' Seminar/Environmental Educators' Conference to assist in the planning of the proposed "Dr. Martin Luther King Boulevard Project" in Miami, Fla. held at Key Biscayne, Nov. 11-14.

On Dec. 3 the Department of Planning Studies was informed that the Executive Committee of the Association of Collegiate Schools of Planning has approved the application of Clemson University for member status. Membership in this association indicates that the Clemson City and Regional Planning program is recognized by both the American Society of Planning Officials and the American Institute of Planners as satisfying the educational qualifications for professional membership in the American Institute of Planners.

Sigma Lambda Chi, a National Construction Honorary Fraternity installed a Clemson Chapter on Jan. 7, 1972. A delegation from the University of Florida presented the Charter to the Department of Building Science. Sigma Lambda Chi's objectives are to develop good relations between campus, industry and the public; to the recognition of outstanding professional men in construction. Jack Clark (Assoc Prof) of the Department of Building Science is a National Director of this Honorary Fraternity.

The Clemson Architectural Foundation presented Gunnar Birkerts, one of the nation's leading architects, for a talk in the Lee Hall Auditorium on Jan. 10. Professor Birkerts is the principal of Gunnar Birkerts and Associates of Birmingham, Mich., and holds numerous awards for his work, including:

AIA First Honor Award for summer house, Northville, Mich., 1961

AIA Citation for Peoples Federal Savings & Loan Association, Royal Oak, Mich. 1963

Honor Award for University Reformed Church, from the Church Guild of America, 1965

AIA Honor Award 1970 for Lincoln Elementary School

Professor Birkerts is also actively involved in Architectural education at the University of Michigan. The talk was focused on the creative architectural work of Gunnar Birkerts.

DAIRY SCIENCE

The annual Dairy Conference will be held at the Clemson House, Jan. 11-12, 1972.

ELEMENTARY AND SECONDARY EDUCATION

Mrs. Teryle Carpenter (Lecturer) read a paper entitled "Teaching Affirmative and Conjunctive Concepts to Five Year Olds: Acquisition and Transfer" at the annual meeting of the National Reading Conference in Tampa, Fla. on Dec. 2-4.

ENGINEERING MECHANICS

W. E. Castro (Assoc Prof) and J. G. Neuwirth (Grad Stu) have a paper in the November issue of Chemical Technology entitled "Friction Reduction with Okra."

ENGLISH

Richard J. Calhoun (Alumni Prof) was elected to the executive council of the Society for the Study of Southern Literature at its recent meeting in Chicago.

ENVIRONMENTAL SYSTEMS ENGINEERING

Wade H. Ponder (Environmental Engr) will be guest speaker at the Atlanta area meeting of the American Chemical Society on Jan. 18. Mr. Ponder, who serves as Revisions Editor for the ChemTeC Project in Berkeley, Calif. will speak on the topic "ChemTeC - The Project, the Students, and Industry."

John H. Austin (Prof) attended the Board of Directors meeting of the American Association of Professors in Sanitary Engineering in Washington, D.C. on Dec. 16-17, at which meeting he was elected President for 1972.

John H. Austin presented a seminar to the staff of Kirkwood Community College, Cedar Rapids, Iowa on Dec. 28 on approaches to technician training in the Environmental Control Field.

B. C. Dysart III (Assoc Prof) and T. M. Keinath (Asst Prof) presented an invited paper entitled "On-Line Control for Improvement of Wastewater Treatment" at the Institute of Electrical and Electronics Engineers National Conference on Decision and Control, Dec. 15-17, in Miami Beach.

J. M. Glennon, Jr. (Sanitary Eng) has left the Dept. of Environmental Systems Engineering to accept a position with the South Carolina Pollution Control Authority. Replacing Mr. Glennon is Dana W. Love, Jr. who was with the North Charleston Consolidated Public Service District as District Engineer and Treatment Plant Superintendent.

ENTOMOLOGY AND ECONOMIC ZOOLOGY

Richard C. Fox (Prof) presented a talk on "Seedling Debarking Weevil Research" at the annual meeting of the N. C. State Cooperative Contactmen in Georgetown on Nov. 3.

INTERDISCIPLINARY STUDIES

D. A. Kay (Grad Stu) received second prize and a cash award in a nationwide competition of student research in environment science. The competition was sponsored by the American Society for Engineering Education. Mr. Kay had submitted a brief report on his thesis research under the title "A Polymeric Coating for a Water Soluble Glass Packaging Container." The research was directed by M. J. Eitel (Assoc Prof) and research funds were provided under a government grant to S. F. Hulbert (Assoc Dean).

S. F. Hulbert, J. J. Klawitter (Asst Prof), and R. B. Leonard (Asst Prof) had the paper entitled "Compatibility of Bioceramics with the Physiological Environment," published in Materials Science Research, Vol. 5 edited by W. W. Kriegel, pp. 417-434, Plenum, New York (1971).

R. G. Topazian (Hd, Oral Surg, Med. Col of Ga), W. B. Hammer (Asst Prof, Med Col of Ga), L. J. Boucher (Dean, School of Dentistry, Fairleigh Dickinson University) and S. F. Hulbert had the paper entitled "Use of Alloplastics for Ridge Augmentation," published in J. Oral Surgery, Vol. 29, pp. 793-798 (1971).

H. R. Bungay (Prof) will spend the entire year of 1972 assigned to the National Science Foundation in Washington, D.C. as Program Director of Enzyme Engineering which is a portion of RANN (Research Applied to National Needs).

MATHEMATICAL SCIENCES

John Kenelly (Prof and Hd) visited Furman University on Nov. 17 and made two invitational addresses, "Geometry and Linear Optimization" and "Undergraduate Research in Convexity."

B. J. Prochaska (Asst Prof) authored a paper entitled "Applications of Generalized Inverses to Estimation in Dynamic Systems" which appeared in the December issue of the Journal of Dynamic Systems, Measurement, and Control.

MATHEMATICAL SCIENCES (Continued)

The following persons presented papers at the AMS meeting at Auburn University in Auburn, Ala., Nov. 19-20:

James A. Reneke (Assoc Prof) presented "Product Integral Solutions for Hereditary Systems"

Thomas G. Proctor (Assoc Prof) presented "Asymptotically Equivalent Sets of Stieltjes Integral Equations."

John K. Luedeman (Asst Prof) presented "On the Embedding of Topological Rings Into Rings of Quotients."

John D. Fulton and John C. Perkins (U.S. Army) presented paper entitled "Symmetric Involutions Over Fields of Characteristic 2."

Renu Laskar (Assoc Prof) and Arthur Pellerin (Grad Stu) presented "Cubic Graphs on Twelve Vertices and the Line Graph of a Finite Affine Plane."

Andrew Sobczyk (Martin Prof) presented "Arrangements of Lines Which Are of Class Two."

RECREATION AND PARK ADMINISTRATION

Jack Stevenson (Assoc Prof) was Chairman and Moderator of a Symposium-Forum dealing with Recreation Education. This session for some 150 participants was part of the National Congress of the National Recreation and Park Association at Houston, Oct. 19-23, 1971.

Jack Stevenson served as Speaker and Group Facilitator for the professional staff of the Greenville YWCA. This two day continuing education retreat was held at Camp Burgess Glen Oct. 23-24, 1971.

VOCATIONAL EDUCATION MEDIA CENTER

Betty P. Watkins (Asst Prof) presented a paper entitled, "The Mechanical Phase of Communications" to the Classroom Educators in Business and Office Education at the American Vocational Association Meeting in Portland, Oregon.

B. Verner Burkett, Jr. (Asst Prof) attended the American Vocational Association Conference in Portland, Oregon, Dec. 4-8, 1971 where he represented the Vocational Education Media Center at the national meeting of media center directors that was called by the U.S. Office of Vocational Education.

COMMITTEE APPOINTED TO DRAFT A UNIVERSITY SEA GRANT PROPOSAL

Responding to a need that Clemson University is well suited to fulfill, Dr. Victor Hurst, Dean of the University, has appointed a committee to draft a University Sea Grant Proposal. The committee will be chaired by Dr. T.L. Senn, Head, Department of Horticulture. Serving with him will be Dr. S.F. Hulbert, Associate Dean for Engineering Research and Interdisciplinary Studies; Dr. P.K. Birkhead, Associate Professor of Geology; Dr. J.C. Hite, Associate Professor of Agricultural Economics; Dr. C.R. Dillon, Assistant Professor of Botany; Dr. B.L. Edge, Assistant Professor of Civil Engineering; Dr. H.A. Loyacano, Assistant Professor of Entomology and Economic Zoology; Dr. Benjamin C. Dysart III, Associate Professor of Environmental Systems Engineering; and Dr. R.W. Henningson, Assistant Dean of University Research, (ex officio).

CALENDAR OF CAMPUS EVENTS

Jan. 15	Sat.		Basketball - Clemson vs. Duke at Durham, N.C.
Jan. 15	Sat.		Graduate Record Exam.
Jan. 15	Sat.		Swimming - Appalachian State.
Jan. 15- Jan. 16	Sat.- Sun.		Clemson Debaters - Gulf Coast Invitational Forensics Tournament; Gult Coast Community College; Panama City, Florida.
Jan. 17	Mon.		Basketball - Clemson vs. North Carolina State at Raleigh, N.C.
Jan. 19	Wed.	8:00 p.m.	Basketball - Clemson vs. Furman -- varsity and freshmen.
Jan. 20	Thurs.	8:00 p.m.	Clemson University Concert Series - Roger Wagner and the Westminster Choir -- Littlejohn Coliseum.
Jan. 20	Thurs.		Clemson Tipoff Club, Clemson House.
Jan. 22	Sat.	8:00 p.m.	Basketball - Clemson vs. Virginia Tech. freshmen vs. N. Greenville Jr. College.
Jan. 22	Sat.		Swimming at Augusta.
Jan. 22	Sat.		Indoor Track - at Philadelphia Track Classic.
Jan. 24	Mon.	7:00 p.m.	Foreign film, <u>Not on your Life</u> (Spanish)- Daniel Hall Theatre - free.
Jan. 25- Jan. 26	Tues.- Wed.		21st Annual Pesticide School, College of Agricultural Sciences, Clemson House.
Jan. 25	Tues.		Swimming - Emory.
Jan. 26	Wed.	8:00 p.m.	Clemson University Concert Series - The National Orchestra of Belgium - Littlejohn Coliseum.
Jan. 27	Thurs.	4:00 p.m.	Environmental Systems Engineering Spring 1972 Seminar - Dr. Harvey F. Ludwig, Engineering-Science, Inc.; Arcadia, California. "Environmental Engineering-- Facts and Fiction, Circa, 1972" -- 302 Rhodes Engineering Research Center.
Jan. 28- Jan. 29	Fri.- Sat.		Clemson Debaters - Red Clay Classic Debate Tournament, West Georgia College, Carrollton, Ga.
Jan. 29	Sat.	8:00 p.m.	Basketball - Clemson varsity and freshmen vs. Georgia Tech.
Jan. 29	Sat.		Indoor Track - at Auburn.
Jan. 31	Mon.	8:00 p.m.	Basketball - Clemson varsity vs. Virginia, freshmen vs. Gainesville Jr. College.

CLEMSON

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NEWSLETTER

INFORMATION FOR THE STAFF OF CLEMSON UNIVERSITY

Vol. 11 No. 12

February 1, 1972

DISTINGUISHED ALUMNI NAMED

The Clemson University Alumni Association has named five alumni, who, because of exceptional professional achievement and community service, will be honored with 1972 Alumni Distinguished Service Awards.

Recipients of the Alumni Association's highest honor are:

T. Ed Garrison (Class of 1942) of Anderson, Route 2, state senator and dairy farmer; Lucius H. Harvin Jr., ('34), Henderson, N.C., president and chief executive officer of Roses Stores, Inc.; Dr. Glenn J. Lawhon Jr., ('46), Hartsville veterinarian and owner of Sandy Memorial Animal Hospital; Earle E. Morris Jr., ('49), Pickens, lieutenant governor of South Carolina and business executive; Harold B. Risher, ('38), Spartanburg, president of Deering Milliken Corp.'s fashion fabrics division.

The five, whose selection is announced by Alumni Association President T.C. Breazeale of Knoxville, Tenn., join 61 alumni who have been saluted since 1960 when the annual program of recognition was begun.

Recipients, who are chosen by the Clemson Alumni National Council from nominations by all alumni, will receive their awards in June during annual reunion weekend activities.

VILLAGE MODEL SHOWN -- Representatives of the two state agencies which conceived and planned a new, far-reaching method for treating South Carolina's mentally-ill view a model layout of the lake-side site near Columbia where a complex of "villages" will be built as part of the "Village System Concept." Left to right are President Robert C. Edwards, Dr. William S. Hall, state commissioner of mental health, and Prof. George Means and Robert Chartier, graduate student, of the Health Care Facilities Studio, College of Architecture.



COLLEGE-LEVEL EXAMINATION PROGRAM

The Clemson University Counseling Center can make available information from Educational Testing Service regarding the College-Level Examination Program which is currently being used by more than 850 colleges and universities. Students are provided an opportunity to earn college credit for knowledge gained outside the classroom. The program consists of two kinds of examinations. The General Examinations measure achievement in five areas of liberal arts: English Composition, Humanities, Mathematics, Natural Sciences, and Social Sciences-History. Subject Examinations measure achievement in 29 college subjects. The amount of credit that is awarded is determined by a department which uses the examinations as an alternative way of meeting course requirements. The Counseling Center has been designated as the agency for administering these tests.

STATE EMPLOYEES' ASSOCIATION ANNUAL BARBECUE

The 1972 barbecue dinner in honor of the members of the S.C. General Assembly is scheduled by the SCSEA for Tuesday, Feb. 15, at the Columbia Shrine Club, near Howard Johnson's on Interstate 26, a few miles north of the city. The cost, for dinner and dancing is \$2.75 per person. Dinner will be served from 6:30 to 8:30; the dance will be from 9 to 1 a.m. Tickets must be purchased in advance. Dr. Graydon W. Brandt, now serving his second year as president of the Tri-County Unit of the SCSEA, has a supply of tickets. His office is in Room 125, Plant and Animal Science Building (Dairy Science). His telephone is 3232.

DO YOU KNOW SOMEONE BORN BEFORE 1896

Many individuals over age 75 miss current news, especially political and financial news. Any citizen born in 1895, or earlier, who is not receiving a public retirement benefit (federal, state, or local) or a public welfare allotment is eligible for a special Social Security benefit of \$48.30 per month (\$72.50 for a couple) even if the aged citizen has never worked under Social Security. If you know of anyone who may qualify, please notify the Anderson (S.C.) Social Security office (882-9800) or the University Personnel office (656-2426)..

DO YOU HAVE A VALID BIRTH CERTIFICATE?

Many Clemson employees born earlier than 1916 have no proof of age which is acceptable to Social Security. If you do not have an official birth certificate issued within a few months after your birth, you may need better evidence than a "delayed birth certificate;" formerly accepted for old-age benefits. One certificate accepted regularly by Social Security is an official transcript of an entry in a U.S. Census (1930, or earlier). Ask at any Social Security office, or at the University Personnel office for an application form. A fee of \$4.00 is charged by the U.S. Census for a search of old records.

MINUTES OF THE MEETING OF THE FACULTY SENATE, DECEMBER 14, 1971

The meeting was called to order at 4:20 p.m. by President Sawyer. Minutes of the meeting of November 9 were approved as corrected.

President Sawyer announced that Dean Victor Hurst, Dean of the University, plans to meet with each of the University councils and committees in an effort to improve communications within the University and committee chairmen will be encouraged to report to those being represented. The minutes of the meetings of University committees will be printed in the Clemson Newsletter. She also announced that as of January 1, 1972, seventy-nine persons, now on the state classification system, will be given faculty status.

Old business concerned coverage of the items in the revised faculty manual which had been turned over to a conference committee. The Senate approved their recommendations as follows:

To accept the wording, as suggested by the administration, which includes approval by both department head and academic dean for outside work by faculty members;

Concerning tenure requirements for full professors, to accept the present wording, as requested by the administration, without adding the Senate's suggested phrase which reduced the waiting period for tenure for full professors;

To substitute the following wording for item #10 concerning the hearing committee under Dismissal from Appointment by the University: "The hearing committee and the faculty member will be notified in writing of the decision of the Dean of the University. The faculty member may appeal to the President of the University from that decision within ten (10) days from the receipt thereof";

To accept the following statement concerning student representation on the Graduate Council: "The graduate students shall be nominated by the Student Senate and appointed by the Dean of the University for a term of one year." This is with the understanding that the Senate is correct in wishing a graduate student organization, when one exists, to do the nominating and that the change will be made then, with the graduate student organization specified at that time;

To accept the following statements concerning the functions of the Graduate and Undergraduate Councils: for the Graduate Council,

MINUTES OF MEETING OF FACULTY SENATE, DEC. 14, 1971 (Continued)

"All policies and regulations affecting graduate curricula and requirements leading to graduate credits, certification, and degrees shall be approved by the Graduate Council and recommended to the Dean of the University"; and for the Undergraduate Council, "All policies and regulations affecting admissions, undergraduate curricula and requirements leading to the undergraduate credits, certification, and degrees shall be approved by the Undergraduate Council and recommended to the Dean of the University";

To substitute the following for the fourth paragraph under General Conditions in the section entitled "Hours of Work, Holidays, and Leave for Academic Personnel:

"Inasmuch as a day of leave is equivalent to a day at work, annual leave or sick leave shall be charged only for absence when a covered employee is scheduled to work";

Under Sabbatical Leave, to substitute the following sentence for the last sentence of the first paragraph:

"Such leave is to be used for further professional improvement, which may include such experiences as formal study or research, related industrial experience, or informal means of improving one's competence";

and to substitute the following paragraph for the fourth paragraph:

"Applications for sabbatical leave by persons serving nine months' appointments may be made for one semester at full pay or two successive semesters at half pay. Applications for sabbatical leave by persons serving twelve months' appointments may be made for periods of up to six months at full pay or for periods from over six months to one calendar year at half pay."

The Senate agreed to accept the following recommendation with the alterations indicated:

To accept the composition of the Undergraduate Council as including one faculty member from each undergraduate college and school, but to request that an officially designated alternate from each school or college be appointed; and to retain the present composition of the Graduate Council, which includes one faculty member from each college with a graduate program, but to request that an officially designated alternate from each college be appointed.

MINUTES OF MEETING OF FACULTY SENATE, DEC. 14, 1971 (Continued)

The Senate approved the following proposal concerning faculty participation in the selection of academic administrators:

When an appointment to an academic administrative position is to be made, an appropriate faculty committee shall be formed to advise in the selection of the person to fill the position.

(1) For the selection of an academic department head or other academic administrators within a department within a college, the dean of the college shall appoint the committee from the faculty within the college; at least 3/4 of the members will be from the affected department and nominated by the faculty of that department, except in the case of a newly created department.

(2) For the selection of an associate dean or director within a college, the dean of the college shall appoint the committee from the faculty within the college.

(3) For selection of any academic administrator of an off-campus activity, the appropriate dean shall appoint the committee from faculty within the affected activity.

(4) For the selection of the dean of a college, the Dean of the University shall appoint the committee from the faculty within the college.

(5) For the selection of a dean, other than a college dean or Dean of the University, the Dean of the University shall appoint the faculty committee.

(6) For the selection of the Dean of the University, the president shall appoint the faculty committee.

(7) For the selection of the president, the University faculty shall be represented by an advisory committee of the Faculty Senate.

The faculty committee will directly advise the person appointing the committee, except that for the appointment of the president the committee will directly advise the board of trustees.

The Senate voted to return to the conference committee the item concerning the duties and the nature of the Administration-Faculty-Student Council.

President Sawyer informed the Senate that the administration had accepted the following Senate suggestions concerning annual leave policy:

Substitution of the following paragraph for the present statements pertaining to the accrual of annual leave:

MINUTES OF MEETING OF FACULTY SENATE, DEC. 14, 1971 (Continued)

"Annual leave (vacation) shall accrue at the rate of 18 working days per year but not more than 18 days may be carried forward into a new leave year. Leave accrues continuously at the rate of 1 1/2 days per month";

and substitution of the following paragraph for the last paragraph under the Annual Leave section:

A regular employee who is separated, regardless of the reason therefor, after completing six months of continuous employment, shall be paid in a lump sum supplement to his final regular payment, the value of annual leave accrued but not taken, as of his final day at work; provided, that no such payment for unused annual leave shall exceed the value of the maximum number of days permitted by State Law; and provided, further, that if payment to an employee for the total value of terminal leave in one fiscal year would result in total compensation in excess of the amount budgeted for him for that fiscal year, payment in the excess amount shall be deferred until the next fiscal year.

There were no reports from the Senate committees, but Professor J. D. Fulton, Chairman of Ad Hoc Committee A on the faculty club, informed the Senate that the committee expects to have a questionnaire circulated to the faculty by the end of January or the beginning of February.

The first item of new business was a proposed resolution from the Policy Committee concerning a special Senate council of off-campus faculty. The proposal called for the addition of a new section numbered Section 6, to Article II of the By-Laws of the Faculty and Faculty Senate as follows:

Section 6, Council of Off-Campus Faculty.

The chairman of the council shall be the Vice President of the Faculty Senate. The council shall consist of members of the Clemson off-campus faculty, elected for a one year term in March or April by the faculties at appropriate off-campus locations. It shall be the duty of this council to consider and make recommendations to the Faculty Senate for action on all matters peculiar to those faculty whose duties are primarily away from the main campus. The council shall be the chief liaison instrument between Clemson's main campus and such faculty, keeping both the Senate and the off-campus faculty fully informed of all matters that concern either group.

MINUTES OF MEETING OF FACULTY SENATE, DEC. 14, 1971 (Continued)

In the interest of immediate implementation of these goals, the Senate voted to recommend the immediate appointment of an ad hoc committee with the specified membership to function until formal action on the proposal is taken by the University faculty.

Also suggested by the Policy Committee was that at the beginning of each academic year, the President of the Faculty Senate write all new and old Clemson University faculty members to inform them of the membership of the Faculty Senate, by colleges and schools, giving office addresses and phone numbers, and emphasizing the right and duty of individual faculty members and groups of faculty to communicate with Faculty Senators on any and all matters of legitimate concern to the Faculty Senate.

The Admissions and Scholarship Committee moved the adoption of a resolution concerning scholastic regulations pertaining to reexamination of graduating seniors who have failed to meet the requirements for graduation because of an F received in their last semester, or because they lacked six grade points of the required 2.0 GPR. The resolution read as follows:

RESOLVED that the paragraph entitled "Examination on F Received in Last Semester" on page 123 and the last paragraph on page 123 and the first three paragraphs on page 124 be deleted from the Clemson University Announcements.

The motion carried.

In response to the Student Senate Resolution R-72-18, the Admissions and Scholarship Committee moved:

that the Faculty Senate express its opposition to requiring each faculty member to place copies of his or her major quizzes in a central file as requested by Student Senate Resolution R-72-18.

The motion carried.

The matter of faculty seating at athletic events came up, apparently being precipitated by recent changes in faculty seating at basketball games. The Senate expressed its desire for President Sawyer to request from the Athletic Council a firm policy for seating of faculty at athletic events. Grave concern was also expressed by some of the Senators over the scheduling of basketball games during exams; this year a freshman game was scheduled on the same afternoon as the all-Freshman English exams. This matter will also be put before the Athletic Council.

The meeting was adjourned at 6:30 p.m.

Absentees from the meeting were: R. F. Zant and F. J. Keller.

UNIVERSITY POLICIES

The following policies were adopted by the Executive Officers at a meeting on January 6, 1972.

1. Policy for Utilization of Communication Materials

All information, including audio, video and visual aids, prepared and distributed by the Department of Agricultural Communications and the University Communications Center of Clemson University is for the express purpose of providing pertinent information. However, other agencies, institutions, and private businesses are encouraged to use this material so long as the information or intent is not altered from its original purpose. No admission or charge of any sort may be levied in connection with the use of these materials. Under no circumstances will permission be granted for use of such information in total or in part which implies to any degree endorsement of a product by Clemson University.

2. Canteen Hours

Hours for operation of the campus canteens are recommended as follows:

(A) University Canteen

Monday through Friday 7:30 a.m. - 11:00 p.m.

Saturday 7:30 a.m. - 1:00 p.m.

Sunday 4:00 p.m. - 11:00 p.m.

(B) Lever Hall Canteen

Monday through Thursday 7:30 a.m. - 11:00 p.m.

Friday 7:30 a.m. - 4:00 p.m.

Saturday Closed

Sunday 4:00 p.m. - 11:00 p.m.

MINUTES OF UNIVERSITY AUDIO-VISUAL COMMITTEE MEETING, DEC. 1, 1971

The second meeting of the University Audio-Visual Committee was held in Room 93 of the P&AS Building with the following present: J. F. Allen, William F. Beckwith, Harry Durham, Mrs. Opal Hipps, J. C. Hubbard, Jr., M. W. Jutras, Mrs. Sarah Walker, Sam Wang, and Mrs. Betty Watkins.

The minutes from the previous meeting on Nov. 4th were read and approved. The secretary was instructed to send the approved minutes to Dean Claud Green for inclusion into the Clemson University Newsletter.

Chairman Jutras asked for comments regarding the description of the University Audio-Visual Committee which had been sent to members earlier.

MINUTES OF UNIVERSITY AUDIO-VISUAL COMMITTEE MEETING (Continued)

Following discussion regarding designation of sex of members and the number of undergraduate and graduate students who should be members of the committee, J. C. Hubbard moved adoption of the committee description. The move was seconded by J. F. Allen. The motion carried unanimously.

Chairman Jutras announced that since the description of the committee required that one-third of the members rotate off each year and that the duration of the initial appointments would be determined by lot, that determination of length of service for existing appointees would take place at the next meeting.

Chairman Jutras asked Harry Durham to report on the expansion plans for the University Communications Center. Durham presented the proposal for utilizing additional space in the basement of the P&AS Building. He said that space would become available when the Central Services facility is moved to the old Laundry Building.

Mrs. Watkins reported on some joint proposals for University wide audio-visual services prepared several years earlier by the University Communications Center and the Vocational Education Media Center. She recommended that the group consider looking into these proposals once again to determine if some advantages might not accrue to the University from their implementation.

Chairman Jutras indicated that he would appoint two subcommittees before the next scheduled meeting. One of the subcommittees would deal with the problem of audio-visual materials storage and retrieval and the other would be concerned with investigating the feasibility of courses in photography and broadcasting.

The next meeting is scheduled for January 5th, 3:30 p.m. in Sirrine Hall Seminar Room.

MINUTES OF UNIVERSITY LIBRARY COMMITTEE MEETING, JAN. 4, 1972

Present: Dean Victor Hurst, (Guest), M. W. Jutras (Chairman), William E. Bachop, R. J. Calhoun, Elizabeth Galloway, Ralph Knowland, R. E. Schoenike, M. D. Sherrill, D. B. Stafford, J. M. Wannamaker, Patrick R. Watts (Student Representative), H. H. Wilson, J. W. G. Gourlay (Secretary).

1. Minutes of the meeting of November 30, 1971 were approved.
2. Dean Hurst commented on the favorable remarks that had been made of the work of the University Library Committee by the Visitation Committee of the Southern Association and then commented on library financing, library building expansion and other items of interest to the Committee. A question and discussion period followed his presentation.

MINUTES OF UNIVERSITY LIBRARY COMMITTEE MEETING, JAN. 4, 1972 (Continued)

3. Dr. Jutras distributed an Ad Hoc Committee report to Investigate Library Orientation and called a meeting for January 18.

4. Time of next meeting: Tuesday, January 18, at 3:30 P.m.

ALGERNON SYDNEY SULLIVAN AWARD

The Scholarships and Awards Committee invites all faculty and staff members to submit nominations for the non-student recipient of this year's Sullivan Award, which will be made on Honors and Awards Day, April 5, 1972. The award is described on page 90 of the 1971-1972 University Announcements.

Nominations should be sent to Norman Olsen, 316 Strode Tower, by March 1.

Non-student recipients of the Sullivan Award for the past ten years have been:

1962	J. D. Lane
1963	R. M. Cooper
1964	F. J. Jervey
1965	C. A. Arrington
1966	Virginia Earle Shanklin
1967	John Robert Roy Cooper
1968	James Francis Byrnes
1969	Inez Watson
1970	George Hubert Aull
1971	Gaston Gage

AGRICULTURAL ENGINEERING

B. K. Webb (Assoc Prof) and C. E. Hood (Assoc Prof) have received notice that Patent on an Orchard Machine, No. 3,635,004 has been issued dated Jan. 18, 1972, assigned to the Research Corporation. This is a result of research conducted at Clemson University by the above investigators.

CHEMISTRY

J. W. Huffman (Prof) attended the 4th International Natural Products Symposium in Kingston, Jamaica, Jan. 3-7, and presented two lectures: "An Approach to the Quasi-Biosynthetic Conversion of Eudesmane to Eremophilane Sesquiterpenes," and with T-M Hsu (Grad Stu), "A One-Step Synthesis of Flindersine."

CHEMISTRY (Continued)

Recently published in J. Org. Chem. 36, 4068 (1971): "Reactions of 2-methylchloroferrocene. Evidence for the Ferrocene Intermediate," J. W. Huffman (Prof) and J. F. Cope (Grad Stu).

COLLEGE OF ARCHITECTURE

Dr. William S. Hall, the State Commissioner of Mental Health, was the guest of Clemson University and the College of Architecture on Jan. 19. The Commissioner was accompanied by Dr. Raymond E. Ackerman, Deputy Commissioner, Community Mental Health Service; Dr. Alexander G. Donald, Deputy Commissioner, Educational and Research Services; Dr. Racine Brown, Director of Program Development Services; Mr. C. Milford Hunter, Chief, Engineering and Planning Dept., Mr. Ted Shelton, Director, Public Information.

The purpose of this visit by officials from the South Carolina Dept. of Mental Health was to apprise the administrative staff, faculty and students of the progress made as a result of the master planning program begun in Oct. 1968, that evolved into "The Village System," and to promote the continuing cooperative spirit between sister institutions so that they may further develop the state's capability for research and implement solutions to meet the Health Care Delivery needs of the people of South Carolina.

"The Village System" an integral part of an overall Health Care Delivery System for the mentally ill, has been approved by the Commissioner of Mental Health, his staff, the Commission on Mental Health, the proper legislative committee, and the Budget and Control Board. Funds have just been provided and approved by the Budget and Control Board for the construction of the first village in this Health Care Delivery System called "Village A." "The Village System," a patient treatment methodology, was developed by an interdisciplinary team made up of staff members of the South Carolina Department of Mental Health and the Health Care Facilities Planning Studio of the College of Architecture, in cooperation with the Clemson Architectural Foundation. The Health Care Facilities Planning Studio, under the direction of George C. Means, Jr. (Prof) is one of the areas of emphasis in the Master of Architecture Program.

A photographic exhibit of the works of famed California architect, Bernard Ralph Maybeck, whose career spanned a 50 year period from the 1890's to the 1940's, will be on display at Rudolph Lee Gallery in the College of Architecture from Jan. 20 - Feb. 5. The display is sponsored by the California Redwood Association and has toured the United States and Canada under the auspices of the Smithsonian Institution. It consists of more than one hundred photographs of Maybeck's most noted works.

COLLEGE OF ARCHITECTURE (Continued)

Harvey Gantt spoke to the College of Architecture on Jan. 24 on "The Planning of Soul City." Mr. Gantt is a graduate of Clemson University and holds a Master of Planning degree from M.I.T. Mr. Gantt has been instrumental in both the planning and architectural concepts of Soul City, a new town in North Carolina. The lecture was sponsored by the Clemson Architectural Foundation.

Stephen Scott Ferebee will speak in the Lee Hall Auditorium on Feb. 7, 8:00 p.m. Mr. Ferebee is the President-elect of the American Institute of Architects. He is also a partner of the architectural firm of Ferebee, Walters and Associates of Charlotte, N. C. The lecture is sponsored by the Clemson Architectural Foundation.

COLLEGE OF ENGINEERING

L. G. Rich (Dean) attended a meeting of the Governor's Committee to Study the Establishment of Plants or Facilities for the Recovery of Nuclear Fuel and the Storage of Waste Nuclear Materials which met in Columbia on Jan. 13.

L. G. Rich was a member of an inspection team for the Engineers' Council for Professional Development which visited the program in Nuclear Engineering at the University of Virginia in Charlottesville on Jan. 6-7.

COLLEGE OF ENGINEERING - CONTINUING EDUCATION

The Second Annual South Carolina State Highway Conference will be held at Clemson House and Lowry Hall Feb. 9-11. The following University personnel will participate: S. M. Willis, Dean of University Extension - Welcome; F. L. Roberts (Asst Prof - CE) - Session Chairman; C. R. Smith (Assoc Prof - IM) - Paper; H. W. Busching (Assoc Prof and Hd - CE) - Paper; J. E. Clark (Assoc Prof - CE) - Paper; J. P. Rostron (Assoc Prof - CE) - Paper; D. B. Stafford (Asst Prof-CE) - Session Chairman; V. S. Hodges (Prof-Arch) - Banquet Speaker; William Baron (Assoc Prof - CE) - Session Chairman. Other participants are members of the South Carolina State Highway Dept., the Portland Cement Association, Soil Conservation Service, and the Asphalt Institute. Additional details may be obtained from Prof. R. A. Banister, Director, Continuing Education, College of Engineering, 116 Riggs.

A Symposium on "Coastal Zone Pollution Management" will be held at Sheraton-Fort Sumter Hotel, Charleston, Feb. 21-22. The Symposium is presented by Southeast Region, Environmental Protection Agency, Atlanta, Ga. and College of Engineering. Twenty-four speakers will present papers at the Symposium. The staff of the symposium are John F. Andrews (Prof and Hd - ESE) - Chairman; E. L. Edge (Asst Prof - CE) - Co-Chairman; and Prof. R. A. Banister, Coordinator, Office of Industrial and Municipal Relations. Additional information or details may be obtained from the members of the symposium staff.

ENGLISH

John J. McLaughlin (Assoc Prof) is co-author with Rowene R. Ansbacher, University of Vermont, of "Sane Ben Franklin: An Adlerian View of His Autobiography" in the November issue of Journal of Individual Psychology.

Harriet Holman (Prof) has published "J. S. Mill's Library: A Further Note" in the fall issue of The Mills News Letter.

ENVIRONMENTAL SYSTEMS ENGINEERING

The ESE Dept. presented an orientation of the Department's work to the members of the South Carolina Board of Health on Jan. 10.

A. Donald Carr, who is Head of the Chemical Engineering Dept. of the University of Cape Town, South Africa, arrived on Jan. 3 to spend a year's sabbatical leave in the Dept. of ESE, where he will be working with Dr. Andrews on industrial waste treatment problems. Dr. Carr's previous research has been primarily in the fields of heat transfer and fluid dynamics. Also, he will be presenting a paper at the AIChE/ASME Heat Transfer Meeting in August. Dr. Carr is accompanied by his wife, Barbara, and three children, Catherine, Andrew and Jonathan, who are at school in Clemson.

Who Is Responsible for Clean Water? This was the theme of an environmental control workshop for 40 municipal and county officials held on Jan. 10 in Orangeburg. The workshop was sponsored by the ESE Dept. as part of a grant under Title I of the Higher Education Act of 1965 and the Public Services Career Program of the Environmental Protection Agency.

FOOD SCIENCE

D. M. Henricks (Assoc Prof), J. F. Dickey (Assoc Prof, Dairy Science) and J. R. Hill (Prof, Animal Science) have a paper in the December issue of Endocrinology entitled "Plasma Estrogen and Progesterone Levels in Cows Prior to and During Estrus."

W. P. Williams (Prof and Hd) served as a member of a site visit team to the Spartanburg County Health Dept. for the South Carolina Regional Medical Program to review a proposal regarding "A Diabetic Teaching Program," Dec. 13.

HONORS PROGRAM COUNCIL

Norman Olsen, Jr. (Chmn) has been appointed to the Inter-Organizational Liaison Committee of the National Collegiate Honors Council.

HORTICULTURE

F. B. Ledeboer (Asst Prof) has received a grant of \$5,000 for general support of golf turf research with special emphasis on putting greens from the Carolina Golf Association.

MECHANICAL ENGINEERING

E. Harrison (Prof) served as toastmaster for the ASME Automatic Control Division Dinner that was held on Nov. 29, 1971 during the ASME Winter Annual Meeting in Washington, D.C.

C. A. Brandon (Assoc Prof) presented the results of work with "Hyperfiltration for Textile Dye Wastewater Renovation for Reuse" to the Textile Wastewater and Air Pollution Control Conference held at Hilton Head, S. C. on Jan. 20-21.

A contract for \$6320 has been awarded to C. A. Brandon and J. C. Hester (Assoc Prof and Hd) by NASA Langley for a "Feasibility Demonstration of Hyperfiltration Techniques Applied to Washwater Reclamation."

MUSIC

Edith B. Card (Instr) presented a program of dulcimer music and folk songs at Limestone College on Jan. 4. She conducted a music workshop for kindergarten teachers in Greenville County on Jan. 13.

PHYSICS

Dr. John Bardeen will be the guest speaker at the Physics Colloquium on Feb. 16. Dr. Bardeen was awarded the Nobel Prize in Physics in 1956 for his pioneering work on semiconductors leading to the invention of transistors. His brilliant work on the theory of superconductors is well known as the "BCS Theory." Dr. Bardeen holds joint Professorship in Physics and Electrical Engineering Depts. at University of Illinois, Urbana, Ill.

P. B. Burt (Prof) and Forrest J. Woods (former Grad Stu) recently had a paper published in the Journal of Mathematical Physics, Nov. issue, entitled "Integral Approximations in Potential Scattering."

Beverly B. Bookmyer (Assoc Prof) has a paper entitled "UBVRI Photometry of V642 Orions" in the Dec. issue of the Publications of the Astronomical Society of the Pacific.

W. E. Gettys (Assoc Prof) gave a colloquium at Auburn University entitled "Fast Neutron Cross Section Calculations."

PHYSICS (Continued)

M. J. Skove (Prof) published an article "Combinations of Third-order Elastic Constants of Tin" with B. E. Powell (Assoc Prof, West Georgia College) in the Dec. 16 issue of Physica Status Solidi.

M. D. Sherrill (Assoc Prof) presented a colloquium at the University of South Carolina on Jan. 20 entitled "Fluxon Motion in Superconductors."

RECREATION AND PARK ADMINISTRATION

Jack Stevenson (Assoc Prof) conducted an all-day Workshop on Dec. 16, 1971 for Campcraft Instructors in Godfrey Hall. This program sponsored jointly by the R.P.A. Dept. and by the American Camping Association, is designed to certify Instructors of outdoor, primitive camping skills. Two participants completed requirements for Director of Instructor Orientation, and one completed requirements for Campcraft Instructor. All participants were professors on southeastern university campuses. Dr. Stevenson is Regional Leadership Coordinator in nine southeastern states for the American Camping Association.

SOCIAL SCIENCES

Bernard Caffrey (Assoc Prof) presented a talk to the Research Society of America Branch at the Lithium Corporation of America and the Gastonia County Heart Association in Gastonia, N. C. on Nov. 30. The title of the talk was "Recent Research Reveals New Insights Into the Relationship Between Coronary Artery Disease and Socio-behavioral Factors."

Bernard Caffrey (Assoc Prof) had a paper entitled: "The Guabal Study of Community Medicine: Socio-psychological factors related to the use of Health Services in a developing country," published in the Abstracts of the 1971 Annual Meeting of the American Public Health Association.

John Y. LeBourgeois (Instr) published a book review of Clyde K. Hyder, ed., Swinburne: The Critical Heritage in Notes and Queries, November, 1971.

ZOOLOGY

The following staff members presented papers during the annual meeting of the American Association for the Advancement of Science in Philadelphia, Pa., Dec. 27-31, 1971: Edmund D. Brodie, Jr. (Asst Prof) - "Further investigations on the toxins of Taricha granulosa."

ZOOLOGY (Continued)

Byron R. Ingram (Asst Prof) - "The effects of photoperiod and temperature on nymphs of two species of damselflies (Odonata: Zygoptera)."

Richard F. Walker (Asst Prof) and Daniel C. Wilhoft (Rutgers University) - "Differential effects of light on acetylserotonin methyl-transferase (ASMT) activity in lizard brains."

Dr. Brodie also represented the South Carolina Academy of Science on the AAAS Council.

The following invited papers have been published:

E. D. Brodie, Jr. and Robert M. Storm (Oregon State University) Plethodon elongatus Van Denburgh in the Catalogue of American Amphibians and Reptiles. Account 102.

E. D. Brodie, Jr., Plethodon Stormi Highton and Brame, in the Catalogue of American Amphibians and Reptiles. Account 103.

R. Walker (Asst Prof) and G. O. Thronebury (New Mexico State University) have recently published a paper entitled "Lepids of Verticellium albo-atrum in Phytochemistry 10(12) 1971.

Sidney A. Gauthreaux (Asst Prof) received the key to the city of Birmingham, Ala., in recognition of his featured address on radar studies of bird migration at the 25th annual meeting of the Birmingham Audubon Society.

A critical review of R. T. Orr's Animals in Migration by Dr. Gauthreaux recently appeared in the ornithological journal, The Wilson Bulletin.

In December Dr. Gauthreaux received a grant of \$19,000 for one year from the Air Force Office of Scientific Research to continue his investigations on bird/aircraft collisions and radar studies of bird migration.

ATTENDANCE AT CONFERENCE

John Mulkeen (Counseling Psychologist), attended the Southeastern Conference of Counseling Center Personnel in Orlando, Florida, December 10-12.

CALENDAR OF CAMPUS EVENTS

Feb.	1	Tues.	8:00 p.m.	National Players will present Shakespeare's <u>Taming of the Shrew</u> in Tillman Hall.
Feb.	1	Tues.	4:00 p.m.	Dr. J.E. Caton of Oak Ridge National Laboratory - Polyacrylamide Gel Electrophoresis - 131 Brackett Hall (Joint seminar with Biochemistry and Plant Pathology and Physiology Depts.).
Feb.	1	Tues.	7:30 a.m.	Dr. Arlo V. Landolt will have a popular lecture "Solar System" in Room 101, Kinard Laboratory.
Feb.	1	Tues.		Swimming - Davidson.
Feb.	2	Wed.		Basketball - Clemson vs. Virginia Tech at Blacksburg, Va.
Feb.	3	Thurs.	8:00 p.m.	Graduate wives' monthly meeting - YMCA.
Feb.	3	Thurs.	12 noon	Clemson Tipoff Club, Clemson House.
Feb.	3	Thurs.	4:00 p.m.	Environmental Systems Engineering Spring 1972 Seminar -- Jack E. Ravan, Regional Administrator, Environmental Protection Agency; Atlanta, Ga. - "A New Environmental Ethic" -- 302 Rhodes Engineering Research Center.
Feb.	5	Sat.	8:00 p.m.	Basketball - Freshmen & Varsity vs. South Carolina.
Feb.	5	Sat.		Swimming - Ga. Tech.
Feb.	5	Sat.		VMI Indoor Track Relays, Lexington, Va.
Feb.	5	Sat.		Admission Test for Graduate Study in Business -- Graduate School Foreign Language Test -- Counseling Center, Room 20, Tillman Hall.
Feb.	7- 24	Mon.- Thurs.		Architectural Exhibit - "Montana Ghost Towns" - Lee Gallery.
Feb.	7	Mon.	7:00 p.m.	Foreign film, <u>The Good Soldier Schweik</u> (German), Daniel Hall Theatre - free.
Feb.	7	Mon.	12:15 p.m.	Dr. R. Rodriguez-Kabana of Auburn University -- "Effects of Herbicides on Multiple Organism Soil Systems" -- 222 Long Hall (Plant Pathology and Physiology Department Seminar). Bring your lunch and munch!
Feb.	9- 11	Wed.- Fri.		Conference, Continuing Education, College of Engineering, The Second South Carolina State Highway Conference, Clemson House and Lowry Hall.
Feb.	10	Thurs.		Swimming - at University of South Carolina.
Feb.	10	Thurs.	4:00 p.m.	ESE Spring 1972 Seminar - R. Kenneth Tinsley, Chief, Water Pollution Control Division, S.C. Pollution Control Authority; Columbia, S.C. - "Water Pollution Control Activities in South Carolina" -- 302 Rhodes Engineering Research Center.

CALENDAR OF CAMPUS EVENTS Continued

Feb.	11	Fri.		Basketball - Clemson vs. North Carolina at Charlotte, N.C. -- North-South Doubleheader.
Feb.	12	Sat.		Basketball - Clemson vs. North Carolina State at Charlotte, N.C. -- North-South Doubleheader.
Feb.	14	Mon.		Basketball - Freshmen at Furman.
Feb.	14	Mon.	7:00 p.m.	Foreign film, <u>Ballad of a Soldier</u> (Russian), Daniel Hall Theatre - free.
Feb.	16	Wed.	8:00 p.m.	Clemson University Concert Series - Jack and Sally Jenkins in "I Do, I Do!" -- Littlejohn Coliseum.
Feb.	16	Wed.		Basketball - Clemson vs. Wake Forest at Winston-Salem, N.C.

PROCEDURES FOR SUBMITTING NEWSLETTER MATERIAL

All Calendar items of campus events (speakers, films, meetings, seminars, sporting events, etc.) should be submitted by written memorandum directly to the Office of Public Relations, Trustee House. Information and news items from the Office of the President, Vice President for Business and Finance, Vice President for Executive Affairs, Vice President for Student Affairs and the Vice President for Development should be submitted by written memorandum to the Office of Public Relations, Trustee House. Information and news items from all areas under the Vice President for Academic Affairs should be submitted by written memorandum to Dr. Claud B. Green, Room 28, Tillman Hall.

The following deadlines prevail: Items to appear in the Newsletter published the 1st of each month must be submitted by the 20th of the previous month; items to appear in the Newsletter published the 15th of each month must be submitted by the 5th of each month.

Vol. 11 No. 13

February 15, 1972

PRESIDENT HONORED AT HIGH SCHOOL DEDICATION

A long-time University associate lauded President Robert C. Edwards' educational contributions and leadership during dedication ceremonies of the new Robert C. Edwards Junior High School on Jan. 30. In his tribute to the Clemson president, former Vice President for Development W. Wright Bryan cited Dr. Edwards as a "Can do man" who possesses the "determination to consider always the human elements, to think always of the individual student and the individual faculty member."

Dr. Cyril B. Busbee, State Superintendent of Education, was the dedicatory speaker.

Excerpts of Dr. Bryan's remarks follow:

"Any educational institution, whether it be an elementary school, a high school, a county school system, or a university, requires two types of leadership. Basically, it requires teachers -- competent, well-trained, dedicated teachers. But, for those teachers to function at their best, it also requires administrators who muster the resources, financial, physical, and personal, which create a setting in which teachers and students can work together effectively.



STATE SUPERINTENDENT OF EDUCATION CYRIL B. BUSBEE addresses a large audience at the dedication of Robert C. Edwards Junior High School. Seated (left to right) are Dr. W. Wright Bryan; President Edwards; State Senator Harris P. Smith; Dr. Curtis A. Sidden, Superintendent of Pickens County School District A; and Floyd A. Jones, principal of the high school.

PRESIDENT EDWARDS HONORED AT HIGH SCHOOL DEDICATION Continued

"It is interesting that in the part of Pickens County School District A which serves Clemson, Central, and Six Mile, we have schools named for persons whose careers epitomize the best in both teaching and educational administration. I have been fortunate to know well all three of the persons thus honored, to have been a student under the two who were teachers and to work closely with the third, who is an administrator of top rank.

"Miss Margaret Morrison, for whom the elementary school at Clemson is named, was up to her retirement a most exceptional teacher, one of the finest I have known at any level, and a capable administrator as well. At the peak of her career the elementary and high school grades of what was then Calhoun-Clemson School were all in one building of which she was unquestioned principal in addition to carrying a heavy teaching load.

"Dr. David Wistar Daniel, for whom our senior high school is named, wielded influence of even broader scope at the college level. As a teacher of English and public speaking, even more importantly as a teacher of life, he left his mark for the better on thousands of students during formative years of the Clemson College which was growing into Clemson University.

"Today we signalize the naming of a third institution, the Robert Cook Edwards Junior High School, for a man who has left the classroom teaching to others but whose accomplishments as an administrator will mark Clemson University for years to come.

"From the viewpoint of a former staff member who worked in closest association with Dr. Edwards for almost seven years, I shall try to tell you what makes the man tick.

"What qualities have enabled him

-- to cap a successful career in the textiles industry with a more significant one in education?

-- to guide Clemson's growth from small college into large and broad university?

-- to meet crisis after crisis in a time of universal ferment?

-- to enlist and maintain the degree of public support necessary for a state university?

-- to set the goals and guide the efforts of diverse and sometimes clashing constituencies: students, faculty, staff, trustees, alumni, state and national government, and the public generally?

"Obviously an unusual combination of qualities is essential in such a leader. I can enumerate for you only a few of those Dr. Edwards possesses:

1. Boundless energy. The man never stops thinking and planning and working. He never stops PERIOD.

2. A capacity to absorb and retain facts and opinions from an astounding variety of sources. He not only never stops; he never forgets.

PRESIDENT EDWARDS HONORED AT HIGH SCHOOL DEDICATION Continued

3. Mastery of details, but with concentration on the main issues.

4. A character which leads him to stand firmly on principle, no matter what the apparent odds, but never to confuse unchanging principle with ever-changing conditions and situations.

5. Determination to consider always the human elements, to think always of the individual student and the individual faculty member. He often says he does not want Clemson to grow to a size where it would be too big for the president to listen to the individual.

6. A constant tendency to minimize obstacles and maximize objective. He is a "Can do" man who gauges all aspects of a situation and, having done so, ACTS. Such a man makes mistakes but his accomplishments outweigh them.

" That last quality, the quality of action, is the mark of the true administrator in any field. It is as important in a junior high school as in an industry or a university. And it is because Dr. Edwards' personal concern goes far beyond the university which is his immediate responsibility into everything which affects the communities where we live that the naming of this school in his honor is so appropriate. Those of use who live here join today in saluting Dr. Edwards for what he is and what he has done."

FEDERAL-STATE RELATIONS OFFICE OPENED

The State of South Carolina has recently contracted with Mr. C. Thomas Bendorf of 1620 I. Street, N.W., Washington, D.C. 20006, to act in the capacity of one who will become the focal point for federal-state relations for the State of South Carolina. In this role, Mr. Bendorf is supported in part by Clemson University and will be available to the administration and faculty of the University who deal with various agencies of the Federal Government relative to program assistance. Mr. Bendorf's office will serve as a referral agency for those questioning a correct agency approach and in many cases will be able to arrange necessary contacts. In addition, his office will serve as a place which administrators and faculty can consider as a base for their Washington operations or they can arrange to use this office in order to meet persons in the Washington area.

Listed below are the names of persons that President Edwards has forwarded to Mr. Bendorf. At the present time, these are the individuals who would normally be expected to contact Mr. Bendorf. We ask that, before any contacts are made, clearance for such contacts be obtained through either the office of Dean Arnold E. Schwartz (research and program grants), Dean of Graduate Studies and University Research, or the office of Mr. Stanley G. Nicholas (construction grants), Vice President for Development. There are undoubtedly other persons whose names should be sent to Mr. Bendorf and deans are requested to send to the office of the Dean of the University the names of those faculty members who, in their opinion, should be added to the list of key personnel to have access to Mr. Bendorf's office. The initial list of key personnel suggested by the President is as follows:

FEDERAL-STATE RELATIONS OFFICE OPENED Continued

The President's Office

Dr. Robert C. Edwards, President
Clemson University
Clemson, South Carolina 29631

Major General A. Wood Rigsby, USAF (Ret.)
Vice President for Executive Affairs
Clemson University
Clemson, South Carolina 29631

Division of Student Affairs

Dean Walter T. Cox, Dean of Student Affairs and Vice President for Student Affairs

Dean Kenneth N. Vickery, Dean of Admissions and Registration and Assistant Vice President for Student Affairs

Office of Development

Mr. Stanley G. Nicholas, Vice President for Development
Mr. James L. Strom, Director of Planning & Corporate Relations

Office of Business and Finance

Mr. Melford A. Wilson, Vice President for Business and Finance
Mr. Henry H. Hill, Director of Auxiliary Enterprises
Mr. Melvin E. Barnette, Budget Director
Mr. Alden L. McCracken, Supervisor of Contract Accounts

Academic Administration

Dr. Victor Hurst, Vice President for Academic Affairs and Dean of the University
Dr. A.E. Schwartz, Dean of Graduate Studies and University Research
Dr. C.B. Green, Dean of Undergraduate Studies
Dr. S.M. Willis, Dean of University Extension

College of Agricultural Sciences

Dr. William H. Wiley, Dean of the College of Agricultural Sciences
Dr. Carl E. Boyd, Director, Livestock-Poultry Health Dept.,
P.O. Box 1771, Columbia, S.C. 29202
Dr. John B. Thomas, Assoc. Director, Livestock-Poultry Health Dept.,
P.O. Box 1771, Columbia, S.C. 29202
Dr. O.B. Garrison, Director of Agricultural Experiment Station
Dr. J.E. Halpin, Assoc. Director of Agricultural Experiment Station
Dr. J.W. Jones, Director of Resident Instruction and Assistant to the Dean of
the College of Agricultural Sciences
Mr. G.R. vonTungeln, Assistant to the Director of Resident Instruction
Dr. W.T. O'Dell, Director of Extension Service
Dr. J.B. Copeland, Assoc. Director of Extension Service
Dr. L.H. Senn, Director of Regulatory and Public Service Programs
Dr. H.B. Jackson, Head of Plant Pest Regulatory Service

FEDERAL-STATE RELATIONS OFFICE OPENED Continued

Mr. R.H. Garrison, Head of Seed Certification
Mr. H.V. Rogers, Head of Fertilizer Inspection & Analysis
Dr. R.C. Hubbard, Editor and Head, Agricultural Communications
Dr. W.J. Lanham, Dean, Dept. of Agricultural Economics & Rural Sociology
Dr. A.W. Snell, Head, Dept. of Agricultural Engineering
Dr. L.P. Anderson, Head, Dept. of Agronomy and Soils
Dr. R.F. Wheeler, Head, Dept. of Animal Science
Dr. N.R. Page, Head, Agricultural Chemical Services
Dr. W.A. King, Head, Dept. of Dairy Science
Dr. S.B. Hays, Head, Dept. of Entomology & Economic Zoology
Dr. W.P. Byrd, Chairman, Experimental Statistics & Statistical Services
Mr. J.S. Evans, Head, Dept. of Farms
Dr. W.P. Williams, Head, Dept. of Food Science
Dr. T.L. Senn, Head, Dept. of Horticulture
Dr. W.M. Epps, Head, Dept. of Plant Pathology & Physiology
Dr. B.D. Barnett, Head, Dept. of Poultry Science

College of Architecture

Professor Harlan E. McClure, Dean of the College of Architecture
Professor Gayland B. Witherspoon, Chairman, Dept. of Architectural Studies
Professor Ralph E. Knowland, Head, Dept. of Building Science
Professor Edward L. Falk, Acting Head, Dept. of Planning Studies
Professor James Dalton, Assistant to the Dean of the College of Architecture

College of Education

Dr. Harold F. Landrith, Dean of the College of Education
Dr. Robert T. Benson, Director, Media Center
Dr. Morris A. King, Head, Dept. of Elementary and Secondary Education
Dr. Alfred F. Newton, Head, Dept. of Industrial Education
Dr. Myrton A. Packer, Director, Educational Services & Placement
Dr. Earl T. Carpenter, Head, Dept. of Agricultural Education

College of Engineering

Dr. L.G. Rich, Dean of the College of Engineering
Dr. S.F. Hulbert, Assoc. Dean for Engineering Research and Interdisciplinary Programs
Dr. Lyle C. Wilcox, Assoc. Dean for Professional Studies and Acting Head, Dept. of Electrical and Computer Engineering
Dr. J.F. Andrews, Head, Dept. of Environmental Systems Engineering
Dr. John Austin, Professor, Environmental Systems Engineering
Dr. J.C. Hester, Head, Dept. of Mechanical Engineering
Dr. R.W. Moorman, Head, Dept. of Engineering Mechanics
Dr. H.W. Busching, Head, Dept. of Civil Engineering
Dr. Gilbert C. Robinson, Head, Dept. of Ceramic Engineering
Dr. C.E. Littlejohn, Head, Dept. of Chemical Engineering

College of Forest and Recreation Resources

Dr. William H. Davis McGregor, Dean of the College of Forest and Recreation Resources
Dr. Herbert Brantley, Assoc. Dean of the College of Forest and Recreation Resources and Head, Dept. of Recreation and Park Administration
Dr. R.M. Allen, Head, Dept. of Forestry

FEDERAL-STATE RELATIONS OFFICE OPENED ContinuedCollege of Industrial Management and Textile Science

Dr. Wallace D. Trevillian, Dean of the College of Industrial Management and Textile Science
Professor Thomas D. Efland, Assoc. Dean of the College of Industrial Management and Textile Science and Director of Research
Dr. Clinton H. Whitehurst, Chairman, Dept. of Industrial Management
Dr. Thomas Bruce Yandle, Assistant Professor, Dept. of Economics
Dr. Donald W. Lyons, Associate Professor, Dept. of Textiles

College of Liberal Arts

Dr. H. Morris Cox, Dean of the College of Liberal Arts
Dr. Marvin A. Owings, Head, Dept. of English
Dr. Harry E. Stewart, Head, Dept. of Languages
Dr. John H. Butler, Head, Dept. of Music
Dr. Robert S. Lambert, Head, Dept. of Social Sciences

College of Nursing

Dr. Geraldine Labecki, Dean of the College of Nursing
Mr. Leon Roswal, Director of the Associate Degree Program

College of Physical, Mathematical and Biological Sciences

Dr. Henry E. Vogel, Dean of the College of Physical, Mathematical and Biological Sciences
Dr. Rufus K. Guthrie, Assoc. Dean of the College of Physical, Mathematical and Biological Sciences
Dr. Jess M. Shively, Head, Dept. of Biochemistry
Dr. Clyde J. Umphlett, Head, Dept. of Botany
Dr. H. Garth Spencer, Head, Dept. of Chemistry
Dr. John Kenelly, Head, Dept. of Mathematical Sciences
Dr. M.J. Benjamin Paynter, Head, Dept. of Microbiology
Dr. E.P. Stillwell, Jr., Head, Dept. of Physics

Note: Following each name and title, the address to be used for mailing will be:

Clemson University
Clemson, South Carolina 29631

BOARD OF TRUSTEES MEMBERS REELECTED

T. Kenneth Cribb of Spartanburg, W. Gordon McCabe, Jr., of Greenville, and Paul Quattlebaum, Jr., of Charleston -- members of the University Board of Trustees whose current terms expire in 1972 -- have been unanimously reelected to the Board by the State Senate.

DEVELOPMENT OFFICE APPOINTS DIRECTOR OF DEFERRED GIFTS

Stewart L. Shehee Sr., longtime South Carolina resident with varied experience in estate planning, insurance, and general business, has been named to head a new program to increase University financial support through deferred giving. Shehee's appointment as director of deferred gifts in the Office for Development is announced by Stanley G. Nicholas, vice president for development.

"Mr. Shehee's efforts will be aimed at establishing avenues to bring in funds and other assets to the University from individuals who wish to remember Clemson in their wills and by other arrangements," said Nicholas. Deferred gifts, whether they be cash, stocks or bonds, real or personal property, or other estate assets, are earmarked by donors during their lifetimes for University ownership at some future time. These gifts will provide income to further the University's educational programs and enhance its cultural stature.

Shehee was most recently associated with the State of Colorado Department of Law as an inheritance and gift tax analyst. He holds a law degree from the University of South Carolina, and a B.S. degree from Louisiana State University.

POTTS PROMOTED BY ARA FOOD SERVICES

Willard W. Potts, ARA Food Services Company and Director of Dining Services at Clemson University, has been promoted by ARA to district manager. He is responsible for ARA's operations located at Anderson College, Clemson University, The Clemson House, Gardner-Webb College, Warren Wilson College, and St. Joseph Hospital in Asheville, N.C.

John N. Talantis has been appointed to succeed Potts as Director of Dining Services at Clemson University. Talantis comes to Clemson from Greensboro where he was Director of Food Services at the University of North Carolina at Greensboro. He is married to the former Mary Hardin. Both Mr. and Mrs. Talantis are natives of Tuscaloosa, Ala. They now reside at Bay Shore Estates, Clemson.

MEDICARE AVAILABLE TO PEOPLE BORN BEFORE 1902

Nearly every citizen aged 68 or older, is eligible for the hospital insurance under MEDICARE, without cost, even if no contributions have been made under Social Security. Anyone who is eligible for this basic hospital insurance may also purchase the medical insurance under MEDICARE, if desired. (Federal employees who do not qualify for basic hospital insurance under MEDICARE may purchase this medical insurance.)

MINUTES OF THE ADMINISTRATION-FACULTY-STUDENT COUNCIL, NOV. 19, 1971

In the absence of Chairman Joseph Hutchinson, John Marshall acted as chairman and called the regular meeting of AFSC to order at 1:15 p.m. in the Student Government Board Room.

The following members were present: John Marshall, E.H. McCarter, Corinne Sawyer, M.N. Lomax, Vernon Hodges and George Moore. Absent were: Joseph Hutchinson, Angela Prince, Fred Keller and A. Wood Rigsby.

MINUTES OF THE ADMINISTRATION-FACULTY-STUDENT COUNCIL, NOV. 19, 1971 Continued

ACTION: A motion by Dr. Sawyer that the minutes of the meetings of September 17, October 8 and October 29 be approved as distributed was seconded and passed.

Discussion continued on the subject of the Student Bill of Rights with indication from both faculty and student affairs representatives that extensive study is being given the bill and reports should be forthcoming early next semester.

ACTION: A motion by Mr. Marshall that the Council meet next on Friday, January 14, at approximately one o'clock was seconded and passed.

Discussion continued on SCPIRG and the resolution adopted by AFSC at the meeting of October 29. Mr. Marshall indicated that the petition drive to determine student interest in the program and means for financing will likely come early next semester.

Mr. Lomax reported briefly on the visitation referendums. With some ideas now of the number of students who desire visitation privileges, the Student Affairs Office is working toward implementation of the program at the start of next semester.

Without objection, the Chairman called adjournment at 2:10 p.m.

MINUTES OF THE ADMINISTRATION-FACULTY-STUDENT COUNCIL, JAN. 14, 1972

Chairman Joe Hutchinson called the regular meeting of the AFSC to order at 1:15 p.m. in the Student Government Board Room.

The following were present: Chairman Joe Hutchinson, Corinne Sawyer, General A.W. Rigsby, Vernon Hodges, John Marshall, Angie F. Prince, and Manning Lomax. Absent were: George Moore, Fred Keller and E.H. McCarter.

A resolution was presented jointly by Joe Hutchinson, Angela Prince and John Marshall calling for faculty and student membership on the University Executive Council.

ACTION: The resolution was tabled for one week in view of the fact that said Council is not a formalized body.

Discussion is to be resumed at the next meeting concerning student voice and vote in executive policy decisions and the AFSC Committee role in expressing opinions directly to the executive level.

An additional point of great consideration and concern was the planned removal of 61 married student housing units to give adequate space for construction of the new Agriculture-Forestry-RPA buildings. Concern was expressed over the inadequate number of community and university housing units. Discussion continued on university plans to satisfy needs of the displaced married students, as well as the growing demand for additional units.

The next meeting was scheduled for Friday, January 21, 12:15 p.m. The call to adjourn came at 2:15 p.m.

MINUTES OF THE ADMINISTRATION-FACULTY-STUDENT COUNCIL, Jan. 21, 1972

Chairman Joseph Hutchinson called the regular meeting of the AFSC to order at 12:22 p.m. in the Student Government Board Room.

The following were present: Chairman Joseph Hutchinson, Angie F. Prince, Vernon Hodges, John Marshall, Corinne Sawyer, M.N. Lomax, E.H. McCarter and Fred Keller. Absent were: General A.W. Rigsby and George Moore.

Discussion continued concerning the removal of married housing units for construction of the Agricultural-Forestry-RPA buildings. Several individual points of clarification were made concerning accommodations for the displaced families and the plans for future construction.

The Council expressed its concern over, and unanimous disfavor with, students who vandalize and steal books and periodicals from the Library.

Also discussed was the continuing increase in students each year versus housing on campus to accommodate the increase.

The next meeting of the Council was set for Friday, February 4, 1972 at 12:15 p.m. The call to adjourn came at 1:05 p.m.

MEMORIAL SCHOLARSHIPS POLICY

At a meeting of the Executive Officers on January 27, 1972, the following policy, regarding Memorial Scholarships, was approved:

In order that its memorial scholarships may give due and proper recognition to the persons memorialized and make a significant contribution to the University's scholarship program, Clemson University hereby establishes a Memorial Scholarships Policy. This policy, governing establishment and administration of future memorial scholarships and administration of such existing memorial scholarships as the donors of which may wish to place under its governance, is as follows:

1. A gift designated for a specific memorial scholarship will be credited as specified. When an otherwise unrestricted gift is received "in memory of" an individual, the gift will be credited to unrestricted revenue.
2. An individually identified Memorial Scholarship Fund will be established with a gift of at least \$10,000.00 in principal. A scholarship so established will be administered by the University Scholarships and Awards (or successor) Committee as provided in a Memorandum of Agreement between the University and the donor(s). Such scholarships will be recognized, among other ways, by a separate and individual Memorial Scholarship Plaque.
3. Any scholarship whose principal amount is less than \$10,000.00 will be placed in the Consolidated Memorial Scholarship Fund.

MEMORIAL SCHOLARSHIPS POLICY Continued

4. When the principal of any scholarship in the Consolidated Memorial Scholarship Fund reaches \$1,000.00, but remains less than \$10,000.00, that scholarship, by name, will be added to the Consolidated Memorial Scholarship Plaque.
5. When the principal of any scholarship in the Consolidated Memorial Scholarship Fund reaches \$10,000.00, that fund will then become a separate, individually identified Memorial Scholarship Fund and will be recognized as specified in Item 2 above.
6. The income of the Consolidated Memorial Scholarship Fund will be distributed by recommendations of the University Scholarships and Awards (or successor) Committee in the best interests of the University's overall scholarship program.
7. All gifts to individually identified Memorial Scholarship Funds and to scholarships in the Consolidated Memorial Scholarship Fund will be acknowledged with appreciation by an appropriate administrator.

MINUTES OF THE SCHOLARSHIPS AND AWARDS COMMITTEE MEETING, JAN. 20, 1972

The meeting was called to order at 3:30 P.M. Minutes of the meeting of Nov. 30 were approved as distributed.

Dean Hurst addressed the committee, suggesting several ways by which intra-University communications might be improved.

The chairman reported on his attendance at the Faculty Senate meeting at which Vice President Stanley G. Nicholas presented a progressive development program which should contribute to an increase in student academic scholarships.

Plans for Honors and Awards Day, April 5, were discussed.

At the request of the local AAUW chapter, the statement regarding their annual award is revised as follows:

The Clemson branch of the American Association of University Women awards an engraved silver bowl annually to the woman graduating in a baccalaureate curriculum with the highest cumulative grade-point ratio, preference being given to full-time Clemson students. Transfer students with at least sixty Clemson credit hours may be considered.

Committee members were reminded of the February 1 deadline for student scholarship applications.

MINUTES OF THE SCHOLARSHIPS AND AWARDS Continued

The committee discussed the case of a student who for the current semester accepted scholarship aid under false pretenses and decided to notify the student that (1) his scholarship will be terminated at the end of this semester, and (2) he will not be considered for further University scholarship aid until he has repaid this semester's portion of his current scholarship.

The committee confirmed selection of William Keith Gibson to receive the Bell Scholarship for 1971-72.

The chairman asked committee members to help encourage nominations for this year's non-student Algernon Sydney Sullivan Award recipient.

The meeting was adjourned at 4:45 P.M.

Present: Norman Olsen, Jr. (Chairman), J. D. Davenport, P. A. Steiner, J. D. Fulton, Susan Rockwell, N. R. Bauld, J. T. Lazar, J. R. Warner, H. E. Morgan, Jr., W. C. Whitten, A. M. Bloss, G. E. Coakley, K. N. Vickery, Carl M. Poe

MINUTES OF THE HONORS COUNCIL MEETING, JANUARY 31, 1972

The meeting was called to order at 3:30 P.M. Minutes of the meeting of September 30 were approved as distributed.

Dean Hurst addressed the council, suggesting several ways by which we might help improve intra-University communications.

The council approved awarding Junior Division Honors Program Certificates to the following, effective December 1971:

Susan Joan Maile Adams	Clemson
Cheryl Anne Anderson	Camp Springs, Md.
George Edward Cothran	Anderson
Terri Anita Davis	Greenwood
Dorothy Jean Dennis	Greenville
Pamela Ann Gibson	Pickens
James Edward Jenkins	North Charleston
George Thomas Kerr	Greenville
Sara Louise Leslie	Clemson
Janet Kay Lowry	Kettering, Ohio
Brenda Joyce Medlin	Summerville
Harriett Adele Peele	Bishopville
Ruthie Prentiss Saunders	Walterboro
Charles Michael Thompson	Fort Eustis, Va.
Arlene Marie Watson	Jacksonville, Fla.
Arwyn Bruce Watson, Jr.	Shreveport, La.

MINUTES OF THE HONORS COUNCIL MEETING Continued

The chairman noted that two students will be graduated with Departmental Honors in May, 1972, assuming they maintain the requisite grade-point ratio during the present semester:

Blaine Edward Gray, Jr. - Electrical and Computer Engineering
George Bradford Sherwood - Physics

The council approved a proposed honors section, Agric. H202, Introduction to Plant Sciences.

The meeting was adjourned at 4:45 P.M.

Present: Norman Olsen, Jr. (Chairman), M. A. Packer, R. D. Shannon, B. E. Gilliland, Elizabeth Hall, Patricia Wannamaker, Jerome C. Wells

GRADUATE COUNCIL MINUTES, JANUARY 14, 1972

The Graduate Council met on January 14, 1972 at 3:30 p.m. and was called to order by Dean Schwartz. Members present were: Dr. Smith, Dr. Wolf, Dr. Camper, Dr. Freeze, Dr. Graben, Professor Means, Dr. Bolen, Dr. Allen, Mr. Mims, and Mr. Bostic.

The minutes of the December 10, 1971 meeting were approved as distributed.

Dean Schwartz introduced Dean Hurst who made appropriate and timely comments to the Council.

A subcommittee consisting of Dr. Wolf, chairman, Dr. Smith, and Mr. Bostic was appointed to study the Marine Geology proposal submitted by the College of Physical, Mathematical, and Biological Sciences.

The following statement regarding faculty and staff enrollment in the Graduate School for the Faculty Manual was approved unanimously:

With the approval of appropriate administrative officials, including the Dean of Graduate Studies and University Research, a qualified employee of Clemson University may pursue graduate work for credit. No member of the faculty, however, with a rank higher than Instructor may be considered as a candidate for an advanced degree at this institution.

Dean McGregor's statement regarding admission requirements to the professional degree programs in the College of Forest and Recreation Resources was reviewed and unanimously approved.

The following courses were approved:

GRADUATE COUNCIL MINUTES Continued

COLLEGE OF ENGINEERING

BioE	803	Polymers as Biomaterials
CrEngr	701	Special Problems

COLLEGE OF FOREST AND RECREATION RESOURCES

RPA	602	Recreation and Park Administration
RPA	606	Recreation for the Ill and Handicapped
RPA	701	Philosophical Foundations of Recreation and Park Administration
RPA	702	Group Processes in Leisure Services
RPA	703	Seminar in Recreation and Park Administration
RPA	704	Comprehensive Recreation Planning
RPA	705	Recreational Aspects of Water Resources
RPA	706	Urban Recreation Analysis
RPA	707	Principles of Environmental Interpretation
RPA	708	Selected Topics

COLLEGE OF LIBERAL ARTS

Hist	613	United States History 1890-1933
Hist	614	The United States Since 1933
Hist	676	Early Modern Europe
Hist	715	History of the Black American
Hist	732	Modernization of East Asia
Hist	741	Comparative History of the Americas
Pol Sc	609	Directed Study in American Institutions
Soc	781	Race Relations
Engl	740	Black American Literature for Teachers
Engl	751	Children's Literature for Teachers
Engl	761	English Literature for Teachers

Dr. Allen requested that RPA 608, Application Recreation Therapy, be withdrawn from the list of courses for approval.

The following course was tabled:

RPA	709	Methods of Recreation Research
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Dean Schwartz informed the Council that Genetics 601, Genetics, has been forwarded to Dr. Hobson for review and recommendation by the Science Teaching Committee. This will be brought back to the Council along with the committee's recommendation. Dr. Camper recommended that the Science Teaching Committee be requested to include a representative from the College of Agricultural and that this recommendation be sent to Dr. Hobson.

Dean Schwartz requested that a progress report be made at the February meeting from each of the subcommittees of the Graduate Council. The chairmen of the subcommittees are: Dr. Graben, Master of Nutritional Sciences; Dr. Graben, Language Policy; Dr. Wolf, Thesis; Dr. Wolf, Marine Geology; Dr. Camper, Transfer of Credits. Dr. Smith was appointed by Dean Schwartz to serve on the Language Policy subcommittee replacing Dr. Riggs.

Dr. Graben made a motion to adjourn, this motion was seconded and carried.

SENIOR YEAR SCHOLARSHIP FOR WOMEN

Ninety scholarships are made available each year by the United States Army for young women who have completed their junior year or are first semester seniors. Each scholarship pays the recipient approximately \$425 per month during her senior year. Interested applicants should write Headquarters, United States Army Third Recruiting District, 1628 Virginia Avenue, College Park, Georgia 30337.

MINUTES OF UNIVERSITY LIBRARY COMMITTEE MEETING, JAN. 18, 1972

Present: M. W. Jutras (Chairman), William E. Bachop, R. J. Calhoun, Elizabeth Galloway, Ralph Knowland, David Rowe (Student Senate), M. D. Sherrill, J. M. Wannamaker, Patrick R. Watts (Student Representative), J. W. G. Gourlay (Secretary).

Minutes of meeting of January 4, 1972 were approved.

Sub-committee Reports

- (A) Sub-committee to Investigate Library Orientation, Dr. R. J. Calhoun and Mr. Rowe (Student Senate Representative)

The two members of the sub-committee consulted with members of the Student Senate, the Clemson University Library staff, and members of the English faculty. The chief complaint from the students concerned the lack of instruction for first-semester freshmen and for transfer students. Those who had attended the library orientation in connection with English 102 felt that they needed more instruction in the use of periodicals, documents, Xerox, microfilm, and microcard machines. It was also noted that some students miss the English 102 orientation and have no chance to make up what they have missed. Complaints were made about the remote location of the newspaper room and the frequent chaotic condition of that room. Many students found back issues of newspapers and unbound periodicals unavailable for their needs.

We have enclosed copies of a letter from Miss Marian Withington, the reference librarian for social sciences and humanities. Miss Withington recommends orientation for first-semester freshmen, possibly through the use of slides and voice tapes produced by the Communications Center.

In view of the complaints and recommendations we have received, the subcommittee recommends consultation with the Communications Center about the feasibility of preparing a slide and/or video tape lecture which could be presented during the first semester orientation or in connection with English 101 assignments. Detailed instruction on the use of Xerox, microfilm, microcard, and microfiche machines should be included.

- (B) Sub-committee to discover why students do not use the Library, Patrick R. Watts (Student Representative)

MINUTES OF UNIVERSITY LIBRARY COMMITTEE MEETING, JAN. 18, 1972 (Continued)

This survey is conducted under the auspices of the University Library Committee. It will help the committee in determining how the Library can be improved for the benefit and enjoyment of the students. Your cooperation will be helpful to the Library and to you. Please answer the questions below honestly and frankly. Thank you for your time and consideration.

1. How many hours per week do you use the University Library?
2. If you do not use the Library more than one hour per day, state why.
3. If you do not like to use the library for any reason, state that reason.
4. Please state any changes in Library policy or procedures you would like to see.

This survey was conducted to discover why few students use the Library. A random sample survey was conducted, using the survey sheet attached. The surveyor used the responses of the students to determine a general consensus as to why the Library is infrequently used.

The results fall into two categories, the second of which is broken into factors arranged in descending order of importance, according to the responses from the students.

1. The Library is not needed.
 - (a) The student had no research to do in the Library.
 - (b) The dormitory room provided an adequate study atmosphere.
2. The Library is not conducive to study.
 - (a) The hours are not long enough.
 - (b) The Library is uncomfortable.
 - (1) Temperature control is inadequate.
 - (2) Chairs, couches, etc. are uncomfortable.
 - (c) The book variety and quantity is inadequate.
 - (d) The Library is too crowded.
 - (e) The magazine section is unorganized.
 - (f) Books are misplaced.
 - (g) Library help is insufficient.

Discussion by the members of the University Library Committee followed each Sub-committee report.

Mr. Gourlay, with the assistance of librarians concerned, will seek the advice and assistance of the Communications Center personnel in preparing a slide and voice tape presentation such as is recommended in the Sub-committee report.

Time of next meeting, February 1, at 3:30 P.M.

CHEMISTRY

Recent publications: "A Stereoselective Nonannulation Synthesis of Eudalene Sesquiterpenes," J. Org. Chem., 37, 13 (1972) by J. W. Huffman (Prof) and M. L. Mole (Grad Stu).

"Studies on Resin Acids. VII. Isomerization of 19-Norabietatetraenes," J. Org. Chem., 37, 17 (1972) by J. W. Huffman (Prof).

CIVIL ENGINEERING

J. Edwin Clark (Assoc Prof) was recently appointed as a member of the State Board of Health's Emergency Advisory Council.

Nuri Akkas (Asst Prof) and Nelson R. Bauld, Jr., (Prof, EM Dept) co-authored a paper entitled, "Buckling and Post-Buckling Behavior of Clamped Shallow Spherical Shells under Axisymmetric Ring Loads," which was published in the Journal of Applied Mechanics, Vol. 38, Dec. 1971.

Herbert W. Busching (Assoc Prof and Hd), Joseph P. Rostron (Assoc Prof) and Freddy L. Roberts (Asst Prof) co-authored a paper entitled, "An Evaluation of the Relative Strength of Flexible Pavement Components" which was presented to two committees (Flexible Pavement Design Committee and Committee A2D06) at the 51st Annual Highway Research Board Meeting on Jan. 18 in Washington, D. C.

Joseph P. Rostron and Herbert W. Busching will present a paper (also co-authored by F. L. Roberts) entitled "Relative Strength of Flexible Pavement Bases" to the Association of Asphalt Paving Technologists in Cleveland, Ohio, Feb. 14-16.

Nuri Akkas published a paper entitled "Static and Dynamic Buckling Behavior of Clamped Shallow Conical Shells" in the International Journal of Mechanical Sciences, Vol. 13, No. 8, 1971.

Billy L. Edge (Asst Prof) presented a paper entitled "Ocean Engineering and Coastal Pollution" at the National ASCE Water Resources Conference in Atlanta, Ga., Jan. 24-28. He also presented a paper entitled "A Hydrodynamic Model for Dredged Material Released from Barges" with Benjamin C. Dysart III (Assoc Prof, ESE) at this meeting.

COLLEGE OF ARCHITECTURE

Thomas McPeak (Assoc Prof and Hd, Dept. of History and Visual Studies), and John Acorn (Assoc Prof) have been named to the Advisory Panel for the Visual Arts by the South Carolina Arts Commission.

Robert England (Assoc Prof) has received a grant from the Faculty Research Committee for continuation of research on "Baroque Fresco Painting in Roman Churches."

Harold Cooledge (Alumni Prof) will speak in the Lee Hall Auditorium, Feb. 28 at 8:00 p.m. on his recent travels in Portugal.

Thomas E. Flowers was the guest of the College of Architecture on Feb. 14. Mr. Flowers is an Associate Professor and Chairman of the Dept. of Art at Furman University. Professor Flowers spoke on the exhibit of his works, now being shown in Lee Hall Gallery through Feb. 28.

Lamar Dodd, Head of the Dept. of Art at the University of Ga. will be an Architectural Foundation guest lecturer at 8:00 p.m., Feb. 21. Professor Dodd will speak about his creative works which will be on display in Lee Hall Gallery starting Feb. 21. The student AIA wives will sponsor a reception in the Gallery following the talk.

COLLEGE OF ENGINEERING

L. G. Rich (Dean) is a member of the Mobility Equipment Command Scientific Advisory Group to the U. S. Army which met at Fort Belvoir, Va. on Jan. 18-19.

J. L. Edwards (Asst to the Dean) served as a member of the Membership Policy Committee of the American Society for Engineering Education which met in Houston, Tex. on Jan. 12 and 13.

COLLEGE OF ENGINEERING - CONTINUING EDUCATION

A Symposium on "Coastal Zone Pollution Management" will be held at Sheraton-Fort Sumter Hotel, Charleston, S. C., Feb. 21-22. The Symposium is presented by Southeast Region, Environmental Protection Agency, Atlanta, Ga., and College of Engineering, Clemson University. Twenty-four speakers will present papers at the Symposium. The staff of the symposium are John F. Andrews (Prof and Hd, ESE) - Chairman; B. L. Edge (Asst Prof, CE) - Co-Chairmen; and Prof. R. A. Banister, Coordinator, Office of Industrial and Municipal Relations. Additional information or details may be obtained from the members of the symposium staff.

COLLEGE OF ENGINEERING - CONTINUING EDUCATION (Continued)

A seminar on "Introduction to Classical and Modern Control Concepts with Application" will be presented on Thursday, March 2, in the auditorium of Earle Hall - sponsored by the Dept. of Chemical Engineering. Appearing on the program will be J. N. Beard (Asst Prof - ChE); S. S. Melsheimer (Asst Prof - ChE); D. F. Bruley (Prof - ChE); and L. B. Koppel, Prof of Chemical Engineering from Purdue University, Lafayette, Indiana. Additional information may be obtained from Prof. R. A. Banister, Director, Continuing Education, College of Engineering, 116 Riggs Hall.

A seminar on "Digital Systems Design - How Complex Components Make It Easier" will be presented on Thursday, March 9 at Clemson House, sponsored by the Dept. of Electrical and Computer Engineering. Appearing on the program will be J. W. Lathrop (Prof - E&CE); J. N. Thurston (Alumni Prof - E&CE); Mr. P. D. Thorpe, District Sales Manager, Motorola Semiconductor Products, Inc., Atlanta, Ga.; and Mr. K. R. Grice, Vice President, Rapid Data, Inc., Anderson, S. C. Additional data may be obtained from Prof. R. A. Banister, Director, Continuing Education, College of Engineering, 116 Riggs Hall.

COLLEGE OF INDUSTRIAL MANAGEMENT AND TEXTILE SCIENCE

John J. Porter (Assoc Prof and Acting Hd, Dept. of Textiles) was chairman for a mid-winter conference, "Textile Wastewater Treatment and Air Pollution Control" which was held at Hilton Head Island, S. C., Jan. 20-21.

ECONOMICS

Frederick H. Rueter (Asst Prof) participated as a discussant of "Optimality in Producing and Distributing Public Outputs" by Charles J. Cicchetti and Robert H. Haveman at the joint session of the Public Choice Society and the American Economic Association at the meetings of the Allied Social Science Associations in New Orleans, La., Dec. 27-29, 1971.

Joseph A. Ziegler (Asst Prof) and Carl L. Dyer (Asst Prof - Industrial Management) received an \$18,000 grant entitled "Strategies for Urban Development" from Title I of the Higher Education Act of 1965. The basic purpose of the grant is to investigate solutions to various urban problems in the Greenville metropolitan area.

ENGLISH

Clemson University has been chosen as a regional judging center for the National Discussion Contest. English staff members who will serve on the judging panel are A. J. Fear (Assoc Prof), Mrs. Janice Sargent (Instr), and C. L. Montgomery (Instr).

ENTOMOLOGY AND ECONOMIC ZOOLOGY

S. B. Hays (Assoc Prof and Hd) was elected a member of the Committee on National Medal of Science - 1972 by the members of the Entomological Society of America at the national meeting of the ESA in Los Angeles, Calif., in Dec. 1971. The committee will select a nominee for this medal for 1973.

Edwin W. King (Prof) attended and participated in a meeting of the Southern Animal Waste Research Committee in Amarillo, Tex., Jan. 17-20.

H. A. Loyacano, Jr. (Asst Prof) attended the annual meeting of S. C. Agricultural Industries at Orangeburg-Calhoun TEC in Orangeburg on Jan. 27. He presented a talk on "Catfish Production and Harvesting." He was elected a Director from the Piedmont District and Secretary-Treasurer of the S.C.A.I.

ENVIRONMENTAL SYSTEMS ENGINEERING

B. C. Dysart III (Assoc Prof) and T. M. Keinath (Asst Prof) presented a paper entitled "Upgraded Treatment Facilities for More Effective Water Quality Management" at the American Society of Civil Engineers Water Resources Engineering National Meeting held in Atlanta, Jan. 24-28.

HORTICULTURE

W. L. Ogle (Prof) presented a paper entitled "Performance of Three Herbicides in Weed Control of Tomatoes" before the Southern Weed Science Society at Dallas, Tex., Jan. 17-20.

INDUSTRIAL MANAGEMENT

B. J. Todd (Prof) served on a panel to evaluate research proposal for the National Science Foundation in Houston, Tex, Jan. 19-21.

James A. Turner, Jr. (Asst Prof) has been selected for inclusion in Volume 13 of Who's Who in the South and Southwest.

LANGUAGES

H. E. Stewart (Prof and Hd) had an article "In Defense of LeFranc as a 'Hero' of Haute Surveillance," published in The French Review, XLV, no. 2 (Dec., 1971), pages 365-372.

INTERDISCIPLINARY STUDIES

F. W. Cooke (Assoc Prof) and B. W. Sauer (Asst Prof) in collaboration with Howard Zeidman, M.D. of Cherry Hill, N. J. displayed a technical exhibit entitled "Scanning Electron Microscopy in Orthopaedic Research" at the annual meeting of the American Academy of Orthopaedic Surgeons held in Washington, D. C., Jan. 29 - Feb. 3. This meeting was attended by some 7,000 researchers and clinicians in the area of orthopaedic surgery. The exhibit will be reassembled and displayed in the third floor lobby of the Rhodes Engineering Research Center during the months of Feb. and March.

MCAT AND DAT

Students planning to take the Medical College Admission Test on May 6, or the Dental Admission Test on April 28, may pick up applications from Dr. Frank A. Burtner, Chairman, Preprofessional Health Curricula, 100 Hardin Hall. Applications for the MCAT must be received in New York not later than April 15, and DAT applications must be received in Chicago not later than April 10.

MECHANICAL ENGINEERING

Alvon C. Elrod (Assoc Prof), chairman of the Continuing Education Committee of the Dixie Region of the American Society of Mechanical Engineers has been elected Secretary of the National Committee.

Alvon C. Elrod has received a \$1000 Faculty Basic Research grant for investigation of fluidized bed combustion.

PHYSICS

J. R. Ray (Assoc Prof) had an article published in the January 1972 issue of the American Journal of Physics entitled "Nonholonomic Constraints and Gauss' Principle of Least Constraint."

F. J. Keller (Assoc Prof) published a paper entitled "M-center Triplet Formation in KCl" with I. Schneider and C. C. Klick (Naval Research Laboratory) in the December 6 issue of Physics Letters.

B. V. Bronk (Assoc Prof) gave a talk at Oak Ridge National Laboratory on Jan. 31 entitled "Kinematics of Cellular Proliferation of Theory and Experiment."

PHYSICS (Continued)

John Bardeen will speak at the Physics Colloquium on "The Non-homogeneous current flow in Superconductors" at 4:00 p.m., Feb. 16. Professor Bardeen has made outstanding contributions to the different areas of solid state physics. His theory on superconductivity and theoretical work on semiconductors leading to the invention of transistors are more widely known. Professor Bardeen has been the recipient of numbers of awards including Buckle Prize, 1954; Nobel Prize in Physics, 1956; Fritz London Award, 1962; National Medal of Science, 1965.

Eugene P. Wigner will be visiting the Physics Dept. Feb. 24 and 25. Professor Wigner has contributed many fundamental results in theoretical physics. He is perhaps best known for his application of group theory to quantum mechanics. Among his many awards are: Fermi Award, 1958; Atoms for Peace Award, 1960; Max Planck Medal, 1961; Nobel Prize in Physics, 1963. Professor Wigner will talk on Friday afternoon on "The Foundations of Quantum Mechanics."

PLANT PATHOLOGY AND PHYSIOLOGY

George E. Carter, Jr. (Grad Stu) and N. Dwight Camper (Assoc Prof) attended the Southern Weed Science Society Meeting in Dallas, Tex. on Jan. 18-20. The following papers were presented: "Chemical and Microbial Degradation of Tri-fluralin," G. E. Carter, Jr. and N. D. Camper. "Factors Influencing Sorption of Herbicides by Isolated Plant Cells," N. D. Camper.

SOCIAL SCIENCES

W.C. Capel (Asst Prof) has published (with B. Goldsmith, K. Wadell and G. T. Stewart) "The Ageing Narcotic Addict: An Increasing Problem for the Next Decades," in Journal of Gerontology, Vol 27. No. (January 1972).

TEXTILES

Carleton W. Roberts (Assoc Prof) has been appointed chairman of the Council Committee on Technician Activities (American Chemical Society) by Dr. M. Tishler, President.

Thomas D. Efland (Assoc Dean and Prof) and E. S. Olson (Assoc Prof) attended the dedication ceremonies at Gaston County Machine Works, Stanley, N. C. on Dec. 11, 1971. This company has located a two pound package dye machine here at the University for our use.

R. H. Barker (Assoc Prof) gave a lecture in "Mechanistic Aspects of Cellulose Flammability" to the polymer group, Dayton Section, American Chemical Society, Dayton, Ohio, Jan. 20.

TEXTILES

Edward A. Vaughn (Asst Prof) was elected Vice-Chairman of the Piedmont Chapter of the American Association for Textile Technology and J. C. Hubbard, Jr. (Prof) was re-elected Secretary-Treasurer.

Donald W. Lyons (Assoc Prof) was appointed to the Curriculum Advisory Committee for Midlands TEC in Columbia. The Curriculum Advisory Committee is developing a new curriculum leading to the degree of Safety Engineering Technology.

J. J. Porter (Assoc Prof and Acting Hd), D. W. Lyons, and William Nolan (Grad Stu) authored the feature article in the January issue of the journal, Environmental Science and Technology. The paper was entitled "Water Use and Wastes in the Textile Industry."

John D. Hatcher (Asst Prof), D. W. Lyons, and J. E. Sunderland (Prof, N. C. State University) published a paper entitled "An Experimental Study of Moisture and Temperature Distributions During Freeze- Drying" in the Journal of Food Science.

CLEMSON UNIVERSITY AT SUMTER

James A. Campbell (Instr in History) has published an edited letter concerning a northern teacher's economic plight in South Carolina in 1876 in the winter issue of the South Carolina Educational Journal.

CALENDAR OF CAMPUS EVENTS

Feb.	16	Wed.	8:00 p.m.	Clemson University Concert Series - Jack & Sally Jenkins in "I Do, I Do!" -- Littlejohn Coliseum.
Feb.	16	Wed.		Basketball - Clemson vs. Wake Forest at Winston-Salem, N.C.
Feb.	17	Thurs.	12 noon	Clemson Tipoff Club, Clemson House.
Feb.	17	Thurs.	4:00 p.m.	ESE Spring 1972 Seminar - Dolloff Fred Bishop, EPA - DC Pilot Plant; Washington, D.C. - "Advanced Waste Treatment Systems at the EPA - DC Pilot Plant" -- 302 Rhodes Engineering Research Center.
Feb.	18	Fri.	4:00 p.m.	Professor K.S. Dodgson, University of Wales: "Bio-chemical Studies on the Biodegradation of the Detergent Sodium Dodecyl Sulfate & Related Compounds" -- Joint Seminar with Biochemistry, Chemistry & Microbiology Depts.; Room 131, Brackett Hall.
Feb.	19	Sat.		Basketball - Clemson varsity vs Maryland at College Park, Md. -- freshmen vs UNC at Charlotte.
Feb.	19	Sat.		Swimming - University of North Carolina

CALENDAR OF CAMPUS EVENTS Continued

Feb.	20	Sun.		Swimming - North Carolina State.
Feb.	21	Mon.		Basketball - Clemson vs. Virginia at Charlottesville, Va.
Feb.	21-	Mon.-		Symposium, "Coastal Zone Pollution Management," Sheraton-
Feb.	22	Tues.		Fort Sumter Hotel, Charleston, S.C. -- presented by
				Southeast Region Environmental Protection Agency and
				College of Engineering, Clemson University.
Feb.	24	Thurs.	4:00 p.m.	ESE Spring 1972 Seminar - Mrs. Helen Bentley, Chairman
				of the Federal Maritime Commission; Washington, D.C.;
				"The Oceanic Environment: Problems and Solutions" --
				302 Rhodes Engineering Research Center.
Feb.	24	Thurs.		College of Engineering program for high school students,
				teachers and counselors.
Feb.	25	Fri.-		Architectural Exhibit - "Photographics" - Lee
March	20	Mon.		Hall Gallery.
Feb.	25	Fri.		Swimming - at Wake Forest.
Feb.	26	Sat.	8:00 p.m.	Basketball - Clemson varsity vs. Wake Forest
				freshmen vs. Fort Jackson.
Feb.	26	Sat.		Swimming - at Duke.
Feb.	26	Sat.		Indoor Track ACC meet at Chapel Hill.
Feb.	28-	Mon.-		"The College of Agricultural Sciences Improvement
March	3	Fri.		of Instruction Week."
Feb.	28	Mon.	7:00 p.m.	Foreign film, <u>A Basket of Crabs</u> (French), Daniel
				Hall Theatre, free.
Feb.	29	Tues.	8:00 p.m.	"The Safety of Our Food" -- Dr. W.J. Darby, Chairman,
				Biochemistry Department and Director, Division of
				Nutrition, Vanderbilt University. Auditorium, P&AS
				Building.
Feb.	29	Tues.-		"Nutrition in the 1970's," Nutrition Conference --
March	2	Thurs.		Auditorium, P&AS Building.

PROCEDURES FOR SUBMITTING NEWSLETTER MATERIAL

All Calendar items of campus events (speakers, films, meetings, seminars, sporting events, etc.) should be submitted by written memorandum directly to the Office of Public Relations, Trustee House. Information and news items from the Office of the President, Vice President for Business and Finance, Vice President for Executive Affairs, Vice President for Student Affairs and the Vice President for Development should be submitted by written memorandum to the Office of Public Relations, Trustee House. Information and news items from all areas under the Vice President for Academic Affairs should be submitted by written memorandum to Dr. Claud B. Green, Room 28, Tillman Hall.

The following deadlines prevail: Items to appear in the Newsletter published the 1st of each month must be submitted by the 20th of the previous month; items to appear in the Newsletter published the 15th of each month must be submitted by the 5th of each month.

CLEMSON NEWSLETTER

INFORMATION FOR THE STAFF OF CLEMSON UNIVERSITY

Vol. 11 No. 14

March 1, 1972

YANDLE APPOINTED ECONOMICS HEAD

Dr. T. Bruce Yandle Jr. has been named head of the Department of Economics in the College of Industrial Management and Textile Science. Yandle, a Lyons, Ga., native, joined the department of economics faculty in August, 1969, as an assistant professor. He came to Clemson from Georgia State University (Atlanta) where he earned the M.B.A. and Ph.D. degrees. Prior to entering graduate school, Yandle pursued a business career, working in various management and sales positions for 15 years. He was executive vice president of an industrial products distribution firm when he left to begin graduate studies.

WATSON RETIRES; HOUSING MANAGER NAMED

The University's housing manager for the past 10 years, retired Army Col. Ernest C. Watson, will retire April 1. His successor will be John W. Young of Marietta, Ga., who comes to Clemson from Lockheed-Georgia Co. Young, a 1943 Clemson graduate, is married to the former Mary Alice Alexander of Six Mile. They have three children.

Col. Watson, a 1928 graduate of Clemson, joined the University staff in 1961 after a distinguished military career which included foreign service in Vietnam, Germany, and North Africa. He has served in various positions at the University. From 1947-59, he was an assistant professor of military science and tactics at Clemson, and later served as professor of military science (1959-61).

ANNUAL RE-WORK PERIOD - TRAVELERS INSURANCE GROUP

The annual re-work period for the Travelers Insurance Group will be March 1-31, 1972. Company representatives will be on campus during this period and will be available to explain Travelers' plans and coverage to any interested employee. Visits will be made to any department desiring such, and at times most convenient to the respective departments.

Any present members desiring to make changes to fit their individual needs may do so at this time. Employees presently enrolled and desiring no changes will be automatically continued and need not contact the representatives at this time. Anyone who desires to obtain this type of insurance coverage must make application during his first 31 days of employment, or during this rework period.

If you wish to make an appointment with one of the representatives, please contact Mr. W.J. Stamey, Personnel Division, Extension 2426.

MINUTES OF THE ADMINISTRATION-FACULTY-STUDENT COUNCIL, FEB. 4, 1972

Chairman Joseph Hutchinson called the regular meeting of the AFSC to order at 12:20 p.m. in the Student Government Conference Room.

Those present were: Chairman Joseph Hutchinson, Vernon Hodges, M.N. Lomax, John Marshall, Corinne Sawyer, Fred Keller and Secretary George Moore. Absent were: A. Wood Rigsby, Angie F. Prince and E.H. McCarter.

ACTION: Mr. Marshall's motion, calling for approval of the minutes of the meetings on November 19, January 14, and January 21 as distributed was seconded and passed.

The continuing theft and vandalism plaguing the library was a subject of discussion. Mr. Marshall reported to the Council that he had talked with Mr. Gourlay, and was forwarding several suggestions that may lead to some reduction in the losses.

ACTION: The Council expressed unanimously their resolve to support any and all reasonable measures to control the theft, destruction and vandalism occurring at the library. Dr. Sawyer's motion to this effect was strongly endorsed personally by each member of the Council.

Mr. Marshall reported that a student liaison committee has been formed to discuss long range planning with the University development officers. A meeting is scheduled next week with Vice President Nicholas.

Mr. Lomax talked briefly about the subject of drug abuse on the campus and specifically about the recent arrest of 15 persons, eight of them Clemson students, on related charges. The Council felt strongly that a student initiated effort to condemn the use of harmful drugs would be very effective.

The subject of adequate campus facilities for the performing arts was considered briefly, chiefly as information, since it is a possible subject of business for the faculty senate's next meeting.

Mr. Hutchinson summarized the forthcoming SLBI sponsored Black Week program. The week will feature films, speakers, a black art exhibit. Various constituencies on the campus have cooperated to make the program possible for February 13-19.

After setting the next meeting for 12:15 p.m., February 18, 1972, the Council was adjourned at 1:15 p.m.

DO YOU PAY A DOMESTIC EMPLOYEE \$4 PER WEEK?

If a domestic employee regularly earns \$4 each week -- or \$50 in a calendar quarter -- federal law requires you as the employer to deduct 5.2 per cent of all cash wages for Social Security, and to remit 10.4 per cent to the U.S. Internal Revenue Service within 30 days after the end of each calendar quarter. You may secure Leaflet No. 21 the Internal Revenue Service, or Social Security, for full instructions.

MINUTES OF MEETING OF FACULTY SENATE, JANUARY 11, 1972

President Sawyer called the meeting to order at 4:17 P.M. The minutes of the meeting of December 17 were approved with the changing of the word "area" in the paragraph concerning composition of Undergraduate and Graduate Councils to "college." President Sawyer introduced Mr. Stanley G. Nicholas, Vice-President for Development, and turned the floor over to him.

Mr. Nicholas introduced two members of his staff, Mr. Stewart Shehee, in charge of deferred gifts, and Mr. James Strom, Director of Planning and Corporate Relations. Mr. Nicholas passed to Senators information and literature concerning the new Clemson University Development Program, and followed with a report on the progress of the Student Union. The Senate was informed that the renovation of Fike Recreation Center is presently underway, costing approximately 2.9 million dollars, and that construction now centers around the swimming facilities and the large gym. Plans for renovation of the loggia area, including court yards, a bowling alley, student government facilities, and other changes, are presently incomplete; the cost is estimated at 3.0 million dollars. Mr. Nicholas announced that other projects in the planning stages are an agricultural administration building; a forestry building; an addition to Lee Hall; and a biological sciences building. President Sawyer and Senators expressed appreciation to Mr. Nicholas for the interesting and informative presentation.

President Sawyer announced the recent decision of the Educational Council to alter the name of the former Honors and Awards Council to the "Scholarship and Awards Council." She further announced that the Senate's items for the Athletic Council have been placed on the official agenda, and the announcement was made that Professor William Steirer has agreed to serve as chairman of the interim committee which will represent off-campus faculty for the remainder of the year.

The Senate approved the following items for the revised faculty manual.

- 1) Addition of the following committee descriptions to the section on Committees and Councils:

COMPUTER ADVISORY COMMITTEE

"This committee consists of the director of the Computer Center, ex officio, one member from each academic college and school nominated by the dean of the college or school and appointed by the Dean of the University for a term of three years, and two students, one undergraduate and one graduate, appointed by the Dean of the University after consultation with the director of the Computer Center. In addition, one representative from the Office of Admissions and Registration and one representative from the Office of Business and Finance are invited to serve on this committee. The committee shall elect its chairman annually.

MINUTES OF MEETING OF FACULTY SENATE, JANUARY 11, 1972 (Continued)

"The Committee advises the Dean of Graduate Studies and University Research on the determination of the needs of the Computer Center, the formation of Computer Center policies, and on such other matters as may be referred to it by the faculty, administration, or students." And

AUDIO-VISUAL COMMITTEE:

"This committee consists of the Director of the University Communications Center, ex officio; one faculty member from each academic college or school, nominated by the dean of the college or school and appointed by the Dean of the University for a term of three years; one undergraduate student and one graduate student nominated by the Student Senate, appointed by the Dean of the University for one year terms. This committee shall elect its chairman and secretary annually."

"The committee advises the Vice President for Development on the audio-visual needs and programs of the University;"

- 2) An addition to the duties of the Administration-Faculty-Student Council as follows:

"All votes shall be recorded, and if minority opinions are expressed, the President will give careful consideration to all questions by attempting to resolve differences by conferring with the interested administrative, faculty, or student groups before making a final decision;"

- 3) A rewrite of the item dealing with faculty participation in the selection of academic administrators as follows:

"When an appointment to an academic administrative position is to be made, an appropriate faculty committee shall be formed to advise in the selection of the person to fill the position as follows:

- "(1) For the selection of an academic department head or other academic administrators within a department, the dean of the college shall appoint the committee from the faculty within the college; at least 3/4 of the members will be from the affected department.
- "(2) For the selection of an associate dean or director within a college, the dean of the college shall appoint the committee from the faculty within the college.
- "(3) For the selection of any academic administrator of an off-campus program, the appropriate dean shall appoint a faculty committee which shall represent both the off-campus program and the appropriate on-campus academic areas.

MINUTES OF MEETING OF FACULTY SENATE, JANUARY 11, 1972 (Continued)

- "(4) For the selection of the dean of a college, the Dean of the University shall appoint the committee from the faculty within the college.
- "(5) For the selection of a dean, other than a college dean or Dean of the University, the Dean of the University shall appoint the faculty committee.
- "(6) For the selection of the Dean of the University, the President shall appoint the faculty committee.

"In the event that a President of the University were to be appointed, the Board of Trustees would recognize the interests of the faculty by appointing the President of the Faculty Senate as a full-fledged member of the search, nominating, and selection committee(s)."

Approval of the latter followed the defeat (by a vote of 17 to 11) of a motion to reinsert the phrase "and nominated by the faculty of that department" in paragraph #1.

The Senate next considered an addition to the duties of the Graduate Council for inclusion in the faculty manual, occasioned by concern over some graduate students who had lost assistantships in mid-year. The motion was to add to the list of duties the words "graduate student welfare." This motion was defeated and a substitute motion to add a sentence to the list of duties, "In matters of graduate student welfare, the Graduate Council should serve as a board of review," passed by a vote of 13 to 12 with one abstention.

It was pointed out to the Senate that the following statement concerning "Procedures for Appointments and Promotions" had been approved at the December meeting but not included in the minutes, due to some confusion:

"Recommendations for promotions, renewal of appointments, or granting of tenure shall originate with the department head. He will appoint an advisory committee, normally composed of senior faculty members, usually of professorial rank, to assist him in reviewing the qualifications of departmental personnel on an annual basis."

The final item of old business was a second reading of the proposed amendment to the Constitution, which would add a Section 6 to the existing Article II of the By-Laws. This was the amendment creating a council to represent off-campus faculty. The Senate unanimously approved the amendment, which will now go to the general faculty for consideration.

There were no committee reports. The Senate, however, was asked to express an opinion of the questionnaire formulated by Ad Hoc Committee A on faculty club facilities. The Senate approved the proposed form, which will be

MINUTES OF MEETING OF FACULTY SENATE, JANUARY 11, 1972 (Continued)

sent to faculty members to determine interest in such a club.

The first item of new business concerned a suggestion from the Traffic and Parking Committee to implement, on a trial basis, a system of unlettered parking for faculty members, which could allow them to use any area on campus designated for faculty, other than reserved spaces. The suggestion was approved unanimously.

Professor J. C. Fanning moved the adoption of a resolution dealing with the recent removal from employment (on the grounds that they were on academic probation) of several graduate teaching assistants. The Senate expressed its unwillingness to comment on the specific case without further information and study, but addressed itself to the principles involved. Discussion turned on the fact (1) that no policy allowing termination of assistantship for a student on academic probation now exists; (2) that all new policy must, under present regulations, be approved by the Graduate Council, which this was not; (3) that under existing regulations, a department head appears free to hire any graduate student for an assistantship provided he is still fully registered at Clemson.

Motions to table the resolution and to divide the resolution into two separate parts for consideration were both defeated. The resolution, as it passed by a vote of 17 to 4, was:

Be it resolved that the Faculty Senate deplores the recent action of the Dean of Graduate Studies in regard to the awarding of graduate teaching assistantships this Spring, and be it resolved that policy decisions of this nature be made only after careful deliberation involving the active participation of the department heads, deans of colleges and the Graduate Council.

The meeting was adjourned at 6:50.

Absent: B. E. Gilliland and A. R. Abernathy.

CIVIL ENGINEERING

The Department of Civil Engineering will serve as host to the 1972 National Science Foundation - American Society of Photogrammetry Visiting Scientist Program. The lecture will be presented by Mr. Earl S. Leonardo of the Goodyear Aerospace Corporation, Litchfield Park, Ariz. Mr. Leonardo will discuss the "Characteristics and Applications of Radar Imagery." The program will be presented in 100 Lowry Hall at 7:30 p.m. on Thursday, March 2.

March 1, 1972

7

STATUS OF APPLICATIONS TO GRADUATE SCHOOL AS OF FEBRUARY 14, 1972
FOR ADMISSION IN AUGUST 1972

MAJOR FIELD	NO. APPLTNS.	ACCEPTED	AV. GRE			AV. GPR	ACTIVE
			(V)	(Q)	(T)		
Agricultural Economics	7	2				3.16	4
Agricultural Engineering	2	1	620	780	1400	3.09	1
Agronomy	4						4
Animal Physiology	1						
Animal Science	1						1
Entomology	6						5
Horticulture	4	3	580	675	1255	3.49	1
Plant Pathology	1						1
Plant Physiology	1						1
Poultry Science	1						1
Wildlife Biology	3	1	360	540	900	2.47	2
Architecture	2						2
City & Regional Planning	2						1
Visual Studies	1						1
Ed Adm Supr	3	2				2.85	
Elementary Education	2	2	510	470	980	2.99	
Industrial Education	2						2
Personnel Services	9	1				2.85	8
Education Non Degree	1	1					
Secondary Education	12	5	520	610	1130	3.05	5
Bioengineering	10	3	535	730	1265	2.98	7
Ceramic Engineering	2	2	605	690	1295	3.82	
Chemical Engineering	42	8	547	727	1275	3.29	28
Civil Engineering	10	6	390	684	1074	3.14	3
Electrical Engineering	17	5	468	668	1136	2.96	11
Engineering Mechanics	2	1	490	630	1120	3.13	1
Environmental Systems Engr.	18	4	475	720	1195	3.07	14
Materials Engineering	4						4
Mechanical Engineering	4	3	410	790	1200	2.95	1
Systems Engineering	3						3
Water Resources Engineering	4	1	570	590	1160	2.60	2
Economics	4						4
Engineering Management	8						6
Management	10	3	505	590	1095	2.94	6
Textile and Polymer Science	3	1					1
Textile Chemistry	5	2	515	605	1120	3.05	2
Textile Science	7						6
English	8	3	513	456	970	3.63	5
History	4	1	640	730	1370	3.29	3
Biochemistry	1						1
Botany	3						3
Chemical Physics	1						
Chemistry	10	2	465	600	1065	2.87	8
Mathematics	66	16	491	624	1116	3.46	48
Microbiology	4						4
Physics	5						5
Zoology	16						15
Forestry	1	1	520	680	1200	2.77	
Recreation & Park Admin.	9	3	510	620	1130	3.13	6
Reading							
TOTALS	346	83	498	644	1143	3.18	237

GRADUATE COUNCIL MINUTES, FEBRUARY 11, 1972

The meeting of the Graduate Council was called to order by Dean Schwartz at 3:30 p.m. Members present were: Dr. Smith, Dr. Wolf, Dr. Jerry Lambert (alternate for Dr. Camper), Dr. Freeze, Dr. Graben, Prof. Means, Dr. Bolen, Dr. Allen, Mr. Mims, Mr. Bostic, and Dr. Dysart (visiting alternate).

The minutes of the January 14, 1972 meeting were approved as distributed.

Dean Harold Landrith, College of Education, was recognized as a guest visitor and available for any questions regarding the off campus Master of Education Program. Discussion and questions took place after which Dr. Wolf made a motion to approve this program in principle. The motion was seconded and unanimously approved.

A subcommittee consisting of Dr. Dysart, chairman, Dr. Smith, Mr. Bostic, and Dr. Graben was appointed to study the Ocean and Coastal Engineering Program and asked to report at the next Council meeting. Dean Schwartz stated that he would like alternate members of the Graduate Council to serve on subcommittees because of the increasing number of items brought before the Graduate Council.

A subcommittee consisting of Dr. Jerry Lambert, chairman, Dr. Bolen, Mr. Mims and Prof. Means was appointed to study the Graduate Record Examination requirement. The group was also requested to consider the Test of English as a Foreign Language (TOEFL) as an admission requirement for foreign graduate students.

Dr. Graben, chairman of the subcommittee to study the Master of Nutritional Sciences, made some introductory remarks regarding the committee's study and findings. Dr. W. P. Williams, Head of the Department of Food Science, was recognized as available for any questions in connection with the Nutritional program. Dr. Graben made a motion that the Council approve the Master of Nutritional Science Program; the motion was seconded and approved unanimously.

Dr. Graben, chairman of the Language Policy Subcommittee distributed the following report and moved that the Council accept this report as information:

Dr. H. E. Stewart, Head of the Language Department, has stated that the standardized CEEB test is neither comparable to the GSFLT, nor is it suitable for a Graduate School language test. He has suggested that the CEEB test be replaced by a more appropriate examining procedure for graduate students taking the two-semester accelerated sequence (151, 152).

In view of his remarks this subcommittee recommends that the Language Department propose an alternate examination to replace the CEEB test, but otherwise leave the Graduate School Language Policy unaltered.

GRADUATE COUNCIL MINUTES, FEBRUARY 11, 1972 (Continued)

Their proposal should be submitted to the Graduate Council for its consideration in the near future.

Dr. Wolf, chairman of the Marine Geology Subcommittee, reported that the committee had reviewed the proposed program, and that it did not conform with the format required by the Commission on Higher Education. Dr. Wolf made a motion that the Master of Science in Marine Geology Program be referred back to the department for appropriate revisions. The motion was seconded and passed.

Dr. Freeze distributed a report from the subcommittee studying Transfer of Credits. This was a preliminary report and no action was taken.

The recommendation of the Science Teaching Committee with regard to Genetics 601 was distributed and discussed. Dr. Lambert made a motion to disapprove Genetics 601 as a graduate course. Dr. Freeze made the following substitute motion: That Genetics 601 be tabled until the next meeting of the Graduate Council in order to hear comments by Dr. Camper. The substitute motion was seconded and approved.

The revised Biochemistry Proposal was distributed to Council members for information. There being no comments or questions regarding the revised proposal, Dean Schwartz will forward the proposal to Dean Hurst.

A subcommittee to study academic standards for Graduate Assistants was appointed consisting of Dr. Wolf, chairman, Mr. Bostic, Mr. Mims, Dr. Graben, Prof. Means, and Dr. Allen. Dean Schwartz stated that this was to be a fact finding committee and the entire council would participate in the formation of any new policies.

A motion to adjourn was made, seconded and approved unanimously.

ANIMAL SCIENCE

G. C. Skelley (Assoc Prof) presented a paper "Pork Acceptability as Influenced by Cooked Soybeans," at the Southern Section, American Society of Animal Science, Richmond, Va., Feb. 14-16.

D. L. Handlin (Asst Prof) presented a paper entitled "Forages for Gestation and Lactation Periods" at the Southern Section, American Society of Animal Science, Richmond, Va., Feb. 14-16.

CHEMISTRY

Recent seminars presented by:

Gary L. Powell (Asst Prof) at Medical College of South Carolina, Charleston, "Pantothenate Metabolism in Bacteria - a Possible Control Mechanism for Lipid Biosynthesis," Feb. 8.

John Jacobus (Asst Prof) at Mercer University, Macon, Ga., "Orbital Symmetry and Enzymes," Feb. 10.

F. B. Brown (Assoc Prof) presented a colloquium before the combined chemistry and physics groups of Virginia Military Institute and Washington and Lee University, Lexington, Va. on Feb. 3, entitled "Vibrational Spectra and Potential Surfaces on Quasilinear Molecules."

J. W. Huffman (Prof) presented a seminar at Belmont Abbey College, N. C. Feb. 1, entitled "Biosynthesis of Sesquiterpenes."

H. G. Spencer (Prof and Hd) presented a colloquium at South Carolina State College, Orangeburg, on Jan. 24, entitled "Determination of Copolymer Micro-structure by NMR."

Recently published in J. Polymer Sci. A-2, 9, 2247 (1971), "Monomer Sequence Distribution in Copolymers of Vinylidene Chloride and Methacrylonitrile by PMR Spectroscopy," H. G. Spencer and R. E. Block (Grad Stu).

ENGLISH

Harriet Holman (Prof) has edited Thomas Nelson Page's Mediterranean Winter-1906, Journal and Letters. The book is published by Field Research Projects.

Cleanth Brooks, Gray Professor of Rhetoric at Yale, will lecture at 4:00 p.m. on Thursday, March 2 in Daniel Auditorium on "T. S. Eliot and the Structure of Modernism."

FOOD SCIENCE

D. M. Henricks (Assoc Prof) and D. R. Lamond (Univ of Calif, Davis) have a paper in the Jan. 27 issue of Nature entitled "Hormonal Interrelationships in Beef Cows with Induced Multiple Ovulations."

D. M. Henricks presented a seminar on "Hormonal Interrelationships in Cows with Induced Multiple Ovulations" to Reproductive Physiology group at Syntex Research Corp., Palo Alto, Calif., Feb. 1.

COLLEGE OF ARCHITECTURE

Ireland Regnier (Assoc Prof on leave) exhibited a one-man show "Screen Paintings," Feb. 21 in London, England. The exhibit demonstrated the technique of "painting through silk screens."

Robert H. Hunter (Prof) and J. E. Pinckney (Assoc Prof) have been appointed to the Environmental Arts Advisory Panel. Sam Wang (Assoc Prof) has been appointed to the Film Advisory Panel of the South Carolina Arts Commission.

MATHEMATICAL SCIENCES

John Kenelly (Prof and Hd) spent Jan. 31 and Feb. 1 at Gardner-Webb College, Boiling Sorings, N. C. as a representative of the Mathematical Association of America Consultant's Bureau, which is funded by the National Science Foundation. Individuals on the 34 member bureau visit colleges and universities in order to review the mathematics curricula, discuss national reports and assess the local program. During the course of the visit, a lecture entitled "Geometry and Linear Optimization" was presented.

POULTRY SCIENCE

W. T. Erwin (former Grad Stu in EE), M. A. Boone (Prof) and B. D. Barnett (Prof) have a paper in the most recent issue of Poultry Science, volume 50: 1883, entitled "Response of the Developing Embryo to Light."

J. B. Cooper (Assoc Prof) has a paper in the most recent issue of Poultry Science, volume 50: 1892, entitled "Colored Feed for Turkey Poults."

The South Carolina Poultry Improvement Association provided a grant of \$2500 for support of research work on Leucocytozoon disease of turkeys (Turkey Malaria) conducted by Juan Solis (Assoc Prof), J. E. Jones (Assoc Prof), and W. T. Derieux (Vet II).

Plans have been made for the "Egg and Art" Exhibition, Mar. 31 - Apr. 2. Artists are encouraged to contact the department for information on entering. A special division for college students is provided for the first time in this year's exhibit.

CALENDAR OF CAMPUS EVENTS

March				Military Banquet & Ball -- Annual Army ROTC Inspection
March	1	Wed.	8:00 p.m.	Basketball - Clemson varsity vs. Duke -- freshmen vs. U.N.C. at Charlotte.
March	2	Thurs.	7:30 p.m.	The Department of Civil Engineering will host the 1972 National Science Foundation - American Society of Photogrammetry Visiting Scientist Program. Mr. Earl S. Leonardo of the Goodyear Aerospace Corporation, Litchfield Park, Ariz., will lecture on "Character- istics and Applications of Radar Imagery." The pro- gram will be presented in 100 Lowry Hall.
March	2	Thurs.	8:00 p.m.	Graduate wives' monthly meeting - YMCA.
March	2-	Thurs.-		ACC Swimming Tournament.
March	4	Sat.		
March	2	Thurs.	12 noon	Clemson Tipoff Club, Clemson House.
March	2	Thurs.	4:00 p.m.	ESE Spring 1972 Seminar -- Rick Davis, "Wastewater Treatment Plant Requirements Based upon the Assimilative Capacity of the Receiving Stream." Clif Hawkins, "Package Waste Treatment Plant."
March	2	Thurs.		Continuing Education seminar, "Introduction to Classical and Modern Control Concepts with Application," Auditorium, Earle Hall, sponsored by Department of Chemical Engineering.
March	3	Fri.		Ft. Hill Clemson Club "Clemson Week Around the World" Banquet -- Clemson House.
March	3-	Fri.	10:00 a.m.- 5:00 p.m.	Department of Microbiology hosting the Spring Meeting of the South Carolina Branch of the American Society For Microbiology at the Clemson House.
			4:00 p.m.	Guest speaker will be Dr. Wolf Vishniac, University of Rochester, N.Y.
March	4	Sat.	9:00 a.m.- 12:00 noon	
March	4	Sat.		Basketball - Clemson varsity and freshmen vs. University of South Carolina at Columbia.
March	4	Sat.		Baseball - Louisville at Clemson.
March	4	Sat.		Tennessee Indoor Track Relays at Knoxville, Tenn.
March	5-	Sun.-		Retail Florist Short Course, College of Agricultural Sciences - Clemson House.
March	6	Mon.		
March	5	Sun.		Baseball - Louisville at Clemson.

CALENDAR OF CAMPUS EVENTS Continued

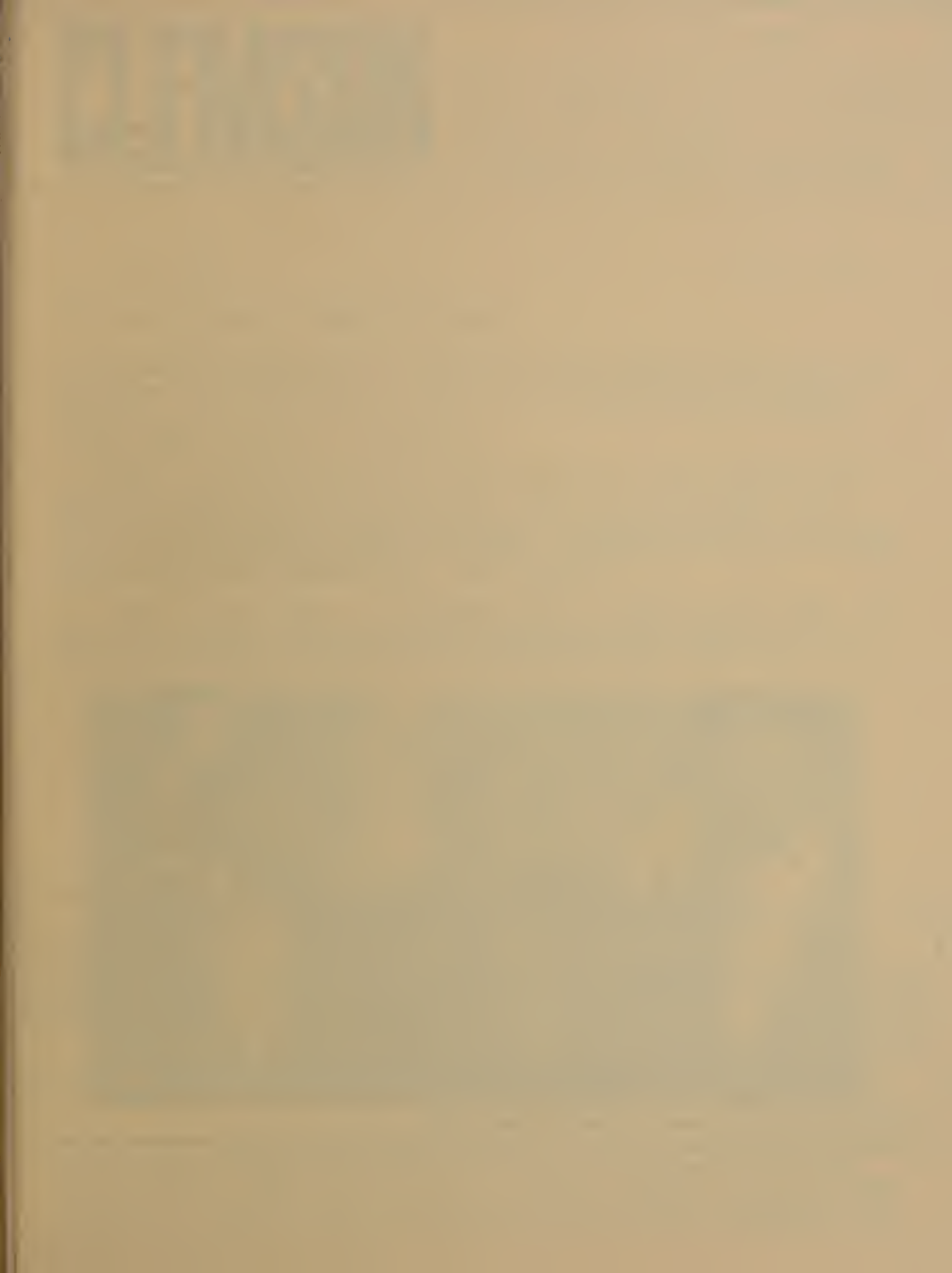
March	6	Mon.	7:00 p.m.	Foreign film, <u>The Roots</u> (Spanish) - Daniel Hall Theatre, free.
March	6	Mon.		Baseball - West Virginia at Clemson.
March	6	Mon.	4:00 p.m.	Department of Microbiology will be sponsoring a seminar in room 1, Physics. The speaker will be Dr. Robert J. Beyers, University of Georgia, Savannah River Ecology Laboratory. He will speak on Current Micro Ecosystem Research.
March	7	Tues.		Baseball - West Virginia at Clemson.
March	7	Tues.	7:30 p.m.	Trustees Medal Oratory Contest Finals - sponsored by Calhoun Forensic Society and Department of English; Daniel Auditorium.
March	8	Wed.		Baseball - West Virginia at Clemson.
March	8	Wed.		Outdoor Track - at Furman.
March	9- March 11	Thurs.- Sat.		Basketball - ACC Tournament - Greensboro, N.C.
March	9	Thurs.	4:00 p.m.	ESE Spring 1972 Seminar - Dr. Charlie O'Melia, Associate Professor of Environmental Engineering, Department of Environmental Sciences & Engineering, The University of North Carolina; Chapel Hill, N.C.-- "The Development of Predictive Models for Lakes."
March	9	Thurs.		Continuing Education seminar, "Digital Systems Design -- How Complex Components Make It Easier," Clemson House, sponsored by Department of Electrical and Computer Engineering.
March	9	Thurs.	4:30 p.m.	Chemistry Seminar - Prof. A.P. Stefani, Dept. of Chemistry, University of Mississippi, "Reactivity of Free Radicals in Addition and Abstraction Reactions." Room 131, Brackett Hall.
March	10	Fri.		Spring holidays begin after last class.
March	10	Fri.		Baseball - at Florida State University.
March	10- March 11	Fri.- Sat.		Indoor NCAA Track Meet.
March	10- March 11	Fri.- Sat.		Debate Tournament - Virginia Intermont University, Bristol, Virginia.
March	10	Fri.	1:30 p.m.	Department of Microbiology will be sponsoring a seminar in room 302 Rhodes Engineering Research Bldg. Dr. F.K. Pfaender, Dept. of Environmental Sciences and Engineering, will be speaking on Microbial Decomposition of D.D.T.

CALENDAR OF CAMPUS EVENTS Continued

March 11	Sat.	Baseball - at Florida State University.
March 12	Sun.	Baseball - at Florida State University.
March 13	Mon.	Baseball - at Kansas City Royals Academy.
March 14	Tues.	Baseball - at Kansas City Royals Academy.
March 15	Wed.	Baseball - at Kansas City Royals Academy.
March 16	Thurs.	Baseball - at Kansas City Royals Academy.



PRESIDENT ACCEPTS GRANT -- A \$5,000 check representing an unrestricted grant to the Department of Chemical Engineering is presented to President Robert C. Edwards by John E. Chambers (Clemson '50), president of Thermo-Kinetics Inc. of Greenville. Looking on is Dr. C.E. Littlejohn, department head. Part of the gift will be used to establish a Thermo-Kinetics research assistantship for a graduate student to do his basic work in simultaneous heat and mass transfer.



PROCEDURES FOR SUBMITTING NEWSLETTER MATERIAL

All Calendar items of campus events (speakers, films, meetings, seminars, sporting events, etc.) should be submitted by written memorandum directly to the Office of Public Relations, Trustee House. Information and news items from the Office of the President, Vice President for Business and Finance, Vice President for Executive Affairs, Vice President for Student Affairs and the Vice President for Development should be submitted by written memorandum to the Office of Public Relations, Trustee House. Information and news items from all areas under the Vice President for Academic Affairs should be submitted by written memorandum to Dr. Claud B. Green, Room 28, Tillman Hall.

The following deadlines prevail: Items to appear in the Newsletter published the 1st of each month must be submitted by the 20th of the previous month; items to appear in the Newsletter published the 15th of each month must be submitted by the 5th of each month.

CLEMSON

CLEMSON UNIVERSITY LIBRARY
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NEWSLETTER

INFORMATION FOR THE STAFF OF CLEMSON UNIVERSITY

Vol. 11 No. 15

March 15, 1972

WILEY RESIGNS AS DEAN OF AGRICULTURAL SCIENCES

Dr. William H. Wiley, dean of the College of Agricultural Sciences, has resigned from his position as dean to return to full-time teaching and research at the University. Until his successor is chosen, Dr. J.W. Jones, director of resident instruction, will serve as interim dean, said Dr. Victor Hurst, vice president for academic affairs and dean of the University.

Wiley, who has assumed duties as professor of poultry science, has held the deanship in agriculture at Clemson since July, 1962. He came to Clemson from the University of Rhode Island where he was dean of the College of Agriculture and director of the Agricultural Experiment Station. "During his 10 years as dean, South Carolina has witnessed many advances in the field of agriculture," said Hurst. "Wiley has been closely identified with much of this progress."

Jones, the interim dean, is a Greenville native and Clemson alumnus (1937). He has the M.S. and Ph.D. degrees from Cornell University, and has served as director of resident instruction in the College of Agricultural Sciences since 1953.



'WELCOME HOME' -- Lt. Gen. Harris W. Hollis (right), South-Carolina native and Clemson alumnus, is welcomed back to the campus for the annual military banquet and ball by President Robert C. Edwards and Col. George K. Maertens, professor of military science and commander of the Army ROTC Instructor Group at the University. Hollis, who serves as chief of the Office of Reserve Components, Department of the Army, Washington, D.C., was guest speaker for the evening.

UNIVERSITY NAMED TO AACTE MEMBERSHIP

Clemson University has been named to membership in the American Association of Colleges for Teacher Education (AACTE). The action came during the association's 24th annual meeting in Chicago. AACTE is a national voluntary association of higher education institutions committed to better teacher education.

Its some 850 member institutions include private and public colleges and universities throughout the states, in Puerto Rico and Guam. Collectively AACTE membership prepares more than 90 per cent of the teaching force entering the nation's schools each year.

MINUTES OF THE ADMINISTRATION-FACULTY-STUDENT COUNCIL, FEB. 18, 1972

Chairman Joseph Hutchinson called the regular meeting of AFSC to order at 12:20 p.m. in the Student Government Conference Room.

Those present were: Chairman Joseph Hutchinson, Vernon Hodges, M.N. Lomax, John Marshall, Corinne Sawyer, Fred Keller, Secretary George Moore, A. Wood Rigsby, Angie F. Prince and E.H. McCarter.

ACTION: A motion by Dr. Keller was unanimously approved by the Council requesting the Library Committee to study the possibility of lowering the cost of Xerox coping in the Library in order to reduce vandalism.

Meanwhile the Council asked Mr. Moore to look into what the Alumni Office projects in the way of Xerox equipment in their Student Services room of the Union, with a view toward providing this service on an interim basis now at the Library.

ACTION: A motion by Mr. Marshall setting the next AFSC meeting for March 3, at 12:15 p.m. was seconded and passed.

A conflict of schedules will necessitate a different meeting time for the March 24 and subsequent meetings. The time for the March 24 meeting was tentatively set for 4:00 p.m.

ACTION: On a motion by Dr. Sawyer, the minutes of the meeting of February 4, 1972 were approved as distributed.

The call to adjourn came at 1:00 p.m.

DEVELOPMENT

Stanley G. Nicholas (VP-Development) was moderator for a discussion on "Long-range Planning - Establishment of Goals, Objectives, and How Often to Review Them," at the American College Public Relations Association's Mason-Dixon Conference at Pinehurst, N.C., Feb. 27 - March 1.

HEALTH AND SCIENCE FAIR

Dr. S. M. Willis, Dean of University Extension, has been appointed University coordinator for the University's Health and Science Fair Committee. The College coordinators for the participating Colleges are as follows:

College of Agricultural Sciences

Dr. J. B. Copeland, Associate Director and Professor of Agricultural Economics and Rural Sociology

College of Architecture

Mr. R. M. Holden, Gallery Curator of the Rudolph Lee Gallery

College of Engineering

Mr. R. A. Banister, Associate Professor, Director of Continuing Education, College of Engineering

College of Forest and Recreation Resources

Mr. S. A. Marbut, Assistant Professor of Forestry

College of Industrial Management and Textile Science

Mr. J. C. Hubbard, Jr., Professor of Textiles

School of Nursing

Mr. Leon Roswal, Associate Professor and Director of the Associate Degree Program in Nursing

College of Physical, Mathematical, and Biological Sciences

Dr. R. K. Guthrie, Associate Dean

MINUTES OF UNIVERSITY AUDIO-VISUAL COMMITTEE MEETING, JANUARY 5, 1972

The third meeting of the University Audio-Visual Committee was held in the conference room of the College of Industrial Management and Textile Science in Sirrine Hall. The following members were present: J. F. Allen, W. F. Beckwith, Thomas Douglass, Harry Durham, Mrs. Opal Hipps, J. C. Hubbard, Jr., M. W. Jutras, Mrs. Sarah Walker, Sam Wang, and Mrs. Betty Watkins.

The minutes from the previous meeting on Dec. 1, 1971 were distributed and following typographical corrections were approved.

Chairman Jutras read an editorial from an Anderson newspaper regarding the educator's misuse of instructional television.

Under the category of old business, Chairman Jutras discussed the description of the University Audio-Visual Committee which is to be published

MINUTES OF AUDIO-VISUAL COMMITTEE MEETING, JAN. 5, 1972 (Continued)

in the faculty manual. The secretary distributed copies of the Committee description and Chairman Jutras relayed a conversation he had with Dean Victor Hurst concerning the composition of the committee and its reporting procedures. Douglass moved and Wang seconded acceptance of the committee description as presented. The motion passed unanimously.

Still operating under the category of old business, Chairman Jutras appointed the following three subcommittees: (1) Subcommittee on Centralized Audio Visual Services - Mrs. Watkins (Chairman), Douglass, Beckwith; (2) Subcommittee on Academic Communications Courses, Wang (Chairman), Walker, Hubbard; (3) Subcommittee to Review Communications Center Services, Allen and Mrs. Hipps, (Co-Chairmen).

Chairman Jutras spoke to the specific duties assigned to each subcommittee as he made the appointments. To the Subcommittee investigating the feasibility of centralized audio-visual services, Jutras stressed the need to maintain flexibility and practicality in any proposal and/or recommendation that might come from the subcommittee. To the Subcommittee investigating academic courses, Jutras raised a number of questions which he hoped the subcommittee would be concerned with; the need for these types of courses; whether the emphasis should be on theory or practice or a combination of the two; in what academic area of the university should the courses be offered; at what level should the courses be aimed; and what kinds of credit hours should be provided for these courses. To the Subcommittee investigating Communications Center services, Chairman Jutras said he felt it would be worthwhile for the total committee to have a complete report which included the variety of services now available from the Communications Center even if some of these services were presently being provided to only a few areas of the University.

Under the topic of new business Tom Douglass announced that the College of Liberal Arts was establishing an audio-visual classroom in Daniel Hall and that students had requested a color TV set be included in this room for the express purpose of viewing offerings from the Educational Television channel and other special presentations. Douglass requested the audio-visual committee's endorsement for establishing this viewing facility. Mrs. Walker asked whether the room would be available to groups outside the English Department. Douglass assured her that it would and stated that reserving the room would go through the English Department with procedures yet to be established. Hubbard moved that the audio-visual committee endorse and commend the College of Liberal Arts' plan to set up an educational TV viewing area in Daniel Hall. Allen seconded the motion and it carried unanimously.

Chairman Jutras raised the question regarding the need for changing the meeting date since Wed. afternoon sessions were not convenient for all committee members under the second semester schedule. After some discussion, the group

MINUTES OF AUDIO-VISUAL COMMITTEE MEETING, JAN. 5, 1972 (Continued)

agreed upon the third Tuesday of each month at 3:30 p.m. as an acceptable meeting time.

The next meeting will be held Feb. 15th at 3:30 p.m. in the lounge on the first floor of Strode Tower.

The meeting was adjourned at 4:40 p.m.

AGRICULTURAL ENGINEERING

T. V. Wilson (Prof) presented a paper entitled "Estimation of Maximum Run-off Volumes for Small Piedmont Watersheds" co-authored by Diego Suarez (former Grad Stu) at the Southeast Region meeting of the American Society of Agricultural Engineers held in conjunction with the Association of Southern Agricultural Workers, Inc. in Richmond, Va., Feb. 13-16. Prof. Wilson also presented a paper for J. T. Ligon (Prof) entitled "A Management Model for a Controlled Drainage and Sub-irrigation System" co-authored by R. C. Warner (former Grad Stu) and J. R. Lambert (Assoc Prof).

C. E. Hood (Assoc Prof) presented a paper entitled "Design of a Portable Dumper-Sorter for Mechanically Harvested Fruits and Vegetables" co-authored by B. K. Webb (Assoc Prof), E. T. Sims, Jr. (Assoc Prof, Horticulture), and T. R. Garrett (Agricultural Science Associate) at the Southeast Region Meeting of the American Society of Agricultural Engineers held in conjunction with the Association of Southern Agricultural Workers, Inc. in Richmond, Va., Feb. 13-16. Two other papers presented at this meeting by E. T. Sims, Jr. of the Horticulture Dept. were co-authored by C. E. Hood (Assoc Prof) and B. K. Webb (Assoc Prof) entitled "Quality and Storage Life of Mechanically Harvested Tomatoes for Fresh Market" and "Quality and Storage Life of Mechanically Harvested Peaches for Fresh Market."

J. G. Alphin (Assoc Prof) presented a paper entitled "Development and Preliminary Testing of a Once-over Mechanical Harvester for the Low-Profile Tobacco Production System" co-authored by J. B. Pitner (Supt., Pee Dee Exp. Station) and Frank C. Patten (Asst Agr Eng, Pee Dee Exp Station) at the Southeast Region meeting of the American Society of Agricultural Engineers held in conjunction with the Association of Southern Agricultural Workers, Inc. in Richmond, Va., Feb. 13-16.

A. W. Snell (Dept Hd and Southeast Dir ASAE) presented a talk on "Issues and Opportunities Facing Members of ASAE" at a general session of the Southeast Region meeting of the American Society of Agricultural Engineers held in conjunction with the Association of Southern Agricultural Workers, Inc. in Richmond, Va., Feb. 13-16.

AGRONOMY AND SOILS

B. J. Gossett (Assoc Prof), M. A. Langston (Grad Stu, USDA, ARS), and T. H. Wright (Grad Stu) attended the Southern Weed Science annual meeting in Dallas, Tex. on Jan. 18-20 and presented the following papers: "Response of Cotton to Topical Applications of Herbicides," B. J. Gossett. "The Response of the Dinitroanilines to Soil Surface, Incorporation and Sub-Surface Layered Methods of Application," M. A. Langston, B. J. Gossett, and R. E. Eplee. "Factors Affecting Butylate Injury to Corn," T. H. Wright, C. E. Rieck, and L. P. Anderson (Prof and Hd).

W. I. Segars (Grad Stu) attended the Association of Southern Agricultural Workers Mtg. in Richmond, Va. on Feb. 13-16 and presented the following paper: "The Influence of Zinc Fertilization on Nutrient Content of Corn," W. I. Segars and J. R. Woodruff (Assoc Prof).

CHEMICAL ENGINEERING

Publication by D. F. Bruley (Prof) and J. B. Ledbetter, "Distributed Parameter Dynamics by Correlation Analysis," AIChE Journal, 18, 127, Jan. 1972.

F. C. Alley (Prof) has been issued U. S. Patent No. 3,598,521, dated August 10, 1971 for a process to remove sulfur compounds from gas streams. The process described in this patent is directed primarily towards air pollution control.

The Chemical Engineering Dept. has received unrestricted gifts of \$5,000 from Thermo-Kinetics, Inc. of Greenville and \$1,500 from Humble Oil Company.

COLLEGE OF ENGINEERING

S. F. Hulbert (Assoc Dean) presented a seminar on Bioceramics for the American Lava Corporation's Technical Form on Mar. 16 at Laurens.

S. F. Hulbert presented the banquet address for National Engineers' Week in Charleston on Feb. 24. The title of the address was "A Better Tomorrow Through Biomedical Engineering."

S. F. Hulbert presented a paper entitled "Bioceramics in Orthopaedic Surgery," at the national conference on Biomaterials for the Orthopaedic Surgeon, in New York City, on Mar. 10.

S. F. Hulbert participated in NIDR's Annual Inspection of the University of Washington's Center for Oral Biology Research on Feb. 28-29.

COLLEGE OF ENGINEERING - Continuing Education

A seminar on "Do You Need Operations Research and Systems Engineering?" will be presented on Mar. 22 and 23 at Clemson House, sponsored by the Dept. of Electrical and Computer Engineering. Appearing on the program will be J. Campbell Martin (Prof - E&CE), Seminar Moderator; J. A. Chisman (Assoc Prof - E&CE), John R. Fraker (Instr - E&CE), I. S. Tolins (Assoc Prof - E&CE), Donald S. McArthur, Director of Corporate Operations Research, Deering Milliken Management Information Center, Spartanburg, and H. P. Myers III, Advisory Marketing Representative, IBM, Greenville. B. C. Dysart III (Assoc Prof - ESE) will be the banquet speaker and J. C. Hite (Assoc Prof - Ag Econ) will be the Thursday luncheon speaker. Additional information may be obtained from Prof. R. A. Banister, Director, Continuing Education, College of Engineering, 116 Riggs Hall.

A seminar on "Solid State Controls for Motors and Other Devices" will be presented on Mar. 29 at Clemson House, sponsored by the Dept. of Electrical and Computer Engineering. Appearing on the program will be R. W. Gilchrist (Prof - E&CE), Seminar Moderator, W. L. Ball (Assoc Prof - E&CE), L. T. Fitch (Assoc Prof - E&CE), and Edwin A. Snape III, Vice-President, Booth Electrosystems, Inc., Greenville. Additional information may be obtained from Prof. R. A. Banister, Director, Continuing Education, College of Engineering, 116 Riggs Hall.

COLLEGE OF INDUSTRIAL MANAGEMENT AND TEXTILE SCIENCE

Donald W. Lyons (Assoc Prof), John D. Hatcher, and R. B. Satterfield, Training Officer for the S. C. Dept. of Labor and Certified Instructor by the U.S. Dept. of Labor for Construction Safety and Health conducted an OSHA Construction Supervisors' Safety Course in the Surrine Auditorium, Feb. 29-Mch 1. Another OSHA Workshop for Home Builders was held at the Colony House in Charleston, Mar. 8.

ECONOMICS

B. R. Skelton (Assoc Prof) participated in two conferences for the purpose of developing school board policy. The conferences were jointly sponsored by the South Carolina School Boards Association and the Center for Integrated Education of the University of South Carolina. One conference was held at Santee, S. C. on Jan. 21-22 and the other at Clemson on Jan. 28-29.

ENTOMOLOGY AND ECONOMIC ZOOLOGY

H. A. Loyacano, Jr. (Asst Prof) served as secretary of the S-83 Technical Committee and presented a paper at the Annual Convention of Catfish Farmers' of America in Dallas, Texas, Feb. 1-6.

ENTOMOLOGY AND ECONOMIC ZOOLOGY (Continued)

The following attended and participated in the program of the 46th meeting of the Southeastern Branch, Entomological Society of America in Mobile, Ala, Feb. 1-3: S. B. Hays (Assoc Prof and Hd), T. R. Adkins, Jr. (Prof), G. R. Carner (Asst Prof), R. C. Fox (Prof), E. W. King (Prof), R. F. Nash, Jr. (Asst Prof), Raymond Noblet (Asst Prof), T. E. Skelton (Assoc Prof), S. G. Turnipseed (Assoc Prof from Edisto Sta), J. A. DuRant and Albert Johnson (Asst Prof from Pee Dee Sta), W. C. Nettles, J. B. Kissam, C. A. Thomas, Jr. (Assoc Prof - Ext) and Grad Res Assts: Kenneth Armstrong, Mr. & Mrs. Herbert Henry, Paul Horton, Glen Garris, Henry Moore, E. F. Suber, and Alton Walker. Fourteen papers were presented by this group.

ENVIRONMENTAL SYSTEMS ENGINEERING

T. M. Keinath (Asst Prof) presented an invited lecture entitled "Physical-Chemical Alternatives to Biological Wastewater Treatment" on Feb. 18 at a short course sponsored by the Environmental Protection Agency and held at the Southeast Water Laboratory, Athens, Ga.

A "Water Quality Workshop" co-sponsored by the Consulting Engineers of South Carolina, the South Carolina Pollution Control Authority, the Environmental Protection Agency, and the Environmental Systems Engineering Dept. was conducted in Columbia Feb. 3-4. This meeting was attended by approximately 120 consulting engineers from throughout the state. Included in the program were presentations by J. F. Andrews (Prof and Hd), and T. M. Keinath (Asst Prof) entitled "A Survey of Waste Treatment Technology" and B. C. Dysart III (Assoc Prof) entitled "Estimating Discharge Effects on Receiving Streams."

John H. Austin (Prof) presented "The Activities in South Carolina Toward Environmental Improvement" to the Environment and Human Survival study group at Wofford College on Feb. 10.

J. F. Andrews and B. L. Edge (Asst Prof, CE) were chairman and co-chairman, respectively, of a Symposium on Coastal Zone Pollution Management which was held in Charleston, Feb. 21-22. The Symposium was jointly sponsored by the College of Engineering and the Southeast Region of the Environmental Protection Agency. 134 people from 23 states attended the Symposium. Featured speakers included, among others, Senator Ernest F. Hollings, Congressman Mendel J. Davis, Jack E. Ravan (Administrator, SE Region, EPA), E. A. Pearson (University of Calif, Berkeley), D. J. O'Conner (Manhattan College, N.Y.) and D. R. F. Harleman (Mass. Institute of Technology).

FERTILIZER INSPECTION AND ANALYSIS

H. V. Rogers (Hd) has been appointed to the Task Force on Environmental Control. This task force was named by the Association of American Plant Food Control Officials.

FOOD SCIENCE

D. M. Henricks (Assoc Prof) served on a panel to evaluate the possibility of using radioimmunoassay to quantitate diethylstilbestrol in tissue for the Food and Drug Administration in Washington, D.C. on Feb. 24.

The following staff members presented papers at the 69th annual meeting of the Association of Southern Agricultural Workers in Richmond, Va., Feb. 12-16: J. C. Acton (Asst Prof), "The Effect of Partial Protein Removal from Muscle Cubes on Extractable Protein, Cooking Loss and Binding Strength in Poultry Meat Loaves," J. J. Jen (Asst Prof), "The Effect of Seaweed Extracts on the Ripening and Keeping Quality of Fresh Tomatoes and Peaches," and 'Monolinia Fructicola Inoculation and Pectin Methyl Esterase Activity in Fresh Freestone Peaches," and J. H. Mitchell, Jr. (Prof), "Lipoxygenase and Peroxidase Activity in Peanuts and Soybeans."

J. H. Mitchell (Prof) was elected chairman of the Dixie Section of the Institute of Food Technologists and J. C. Acton (Asst Prof) was elected Treasurer at a meeting of this organization in Athens, Ga., Feb. 25.

GEOLOGY

John W. Harrington, Professor and Chairman of the Dept. of Geology at Wofford College, will be the guest speaker of the Dept. of Chemistry and Geology on March 22 at 7:30 p.m. in 235 Brackett Hall. The topic of Dr. Harrington's presentation will be "Understanding Geology."

INDUSTRIAL EDUCATION

J. Page Crouch (Assoc Prof) spoke to a group of high school students, teachers and industrial representatives in Charlotte, N. C. on Feb. 22. The meeting was called by Rexham, Inc. and the Printing Industry of the Carolinas for the purpose of organizing an Explorer post in the field of Graphic Arts. The group will spend an entire Saturday in the near future working in the Graphic Arts lab here at Clemson under the supervision of the Clemson Graphic Arts Society.

INTERDISCIPLINARY STUDIES

Clemson University has received a grant for \$2000 from the National Science Foundation and a contract for \$3,195 from the Office of Naval Research for Clemson University's Fourth Annual Biomaterials Symposium entitled "Materials and Design Considerations for the Attachment of Prostheses to the Musculo-Skeletal System."

INDUSTRIAL MANAGEMENT

C. H. Whitehurst, Jr. (Prof and Hd) addressed the Fort Jackson Armed Forces Management Association on Feb. 28, his topic was "The Economics of American Defense in the 1970's."

James A. Turner, Jr. (Asst Prof) was elected vice president of the South Carolina Association of Accounting Instructors at a meeting held in Columbia on Feb. 14.

C. O. Shuler (Assoc Prof) received a grant of \$6,000 from the Dept. of Health, Education, and Welfare to conduct a "Decision Making Seminar for Health and Hospital Administrators" from May 29 through June 1.

E. A. LaRoche (Assoc Prof) was elected secretary of Phi Kappa Phi, Clemson University Chapter for the year 1972-73.

MICROBIOLOGY

Ann W. Baxter (Assoc Prof) has been appointed by the President of the American Society for Microbiology (ASM) to serve on the Committee on Undergraduate and Graduate Education of the newly created Board of Education and Training of the ASM. Dr. Baxter attended the organizational meeting of this committee at Indiana University, Bloomington on Feb. 5-6.

MILITARY SCIENCE

Captain Paul E. Blackwell (Asst Prof) has recently been selected as the Outstanding ROTC Instructor in Third U.S. Army. Nominated by the Clemson ROTC Instructor Group, he competed successfully against instructors from other institutions throughout the southeast. Selection of a national winner from the four area winners is now being made.

MUSIC

Edith Card (Instr) presented four "mini concerts" of dulcimer and folk music to the first grades of the Laurens County Schools on Feb. 17. These concerts were sponsored by the South Carolina Arts Commission.

SCHOOL OF NURSING

Arline M. Duvall (Assoc Prof) and Susan Rockwell (Instr) have been appointed to the Panel of Nurse Advisors to the South Carolina Regional Medical Program's Continuing Education Program.

PHYSICS

The following papers were presented at the national meeting of the American Physical Society in San Francisco in February: "Nonadditive Dispersion Energy in Neon and Argon" by H. W. Graben (Prof) and R. H. Fowler (former Grad Stu). "Integral Approximations in Potential Scattering II" by P. B. Burt (Assoc Prof) and "Self Consistent Field Theory of Extra Strong Interactions" with W. D. Chervenak (former Grad Stu). "Deformation Twinning in Zn, Sn, and Bi Single Crystal Whiskers" by M. J. Skove (Prof), E. P. Stillwell (Prof and Hd) and D. R. Overcash (former Grad Stu).

P. B. Burt and W. J. Chervenak published an article entitled "Excitations in a Dense Baryon-Anti Baryon System" in the Czechoslovak Journal of Physics, No. 11 (1971) in November.

PLANT PATHOLOGY AND PHYSIOLOGY

W. M. Dowler (USDA) attended the annual National Peach Council meeting held in Atlantic City, N.J., Feb. 20-23. He was a member of a panel discussing peach decline in relation to hardiness and time of pruning.

Wayne Sitterly (Prof and Supt, Truck Station) and W. M. Epps (Prof and Hd), and J. D. Maxwell (Asst Prof, Agronomy) participated in the USDA Symposium on "Mechanisms of Resistance in Plants" held at Georgetown, Jan. 30-Feb. 4.

The following members attended and presented papers at the Southern Division of the American Phytopathological Society Meetings in Richmond, Va., Feb. 13-16. L. W. Baxter, Jr. (Prof) - "Infection studies and source of resistance to *Glomerella dieback* of canker of *Camellia*," W. Kenneth Glenn, Jr. (Grad Stu), "Studies on fungicidal control of black spot roses after severe disease development" with L. W. Baxter, Jr. and Wesley Witcher (Prof). G. C. Kingsland (Assoc Prof) - "Factors influencing survival and germination of *Helminthosporium sorokinianum* conidia in South Carolina."

O. W. Barnett, Jr. (Asst Prof) is the recipient of a Faculty Research Committee grant in the amount of \$1,000 in support of "Electron Microscopy of Enation Diseased Clover Plants."

SOCIAL SCIENCES

W. C. Capel (Asst Prof) has published (with R. Baldinger and G. T. Stewart) "Pot Smokers, Junkies and Squares: A Study of Female Values," in the International Journal of the Addictions. Vol. 7, No. 1 January 1972.

TEXTILE DEPARTMENT

D. W. Lyons (Assoc Prof) was elected to the Board of Directors of the South Carolina Safety Council.

D. W. Lyons, John D. Hatcher (Asst Prof) and J. E. Sunderland, Prof, North Carolina State University, published a paper in the January issue of the International Journal of Applied Radiation and Isotopes. The paper was entitled "The Use of Nuclear Radiation to Measure Local Moisture Content During Drying."

D. W. Lyons and J. D. Hatcher presented a one day seminar on aspects of safety and health in textile manufacturing to the Industrial Hygiene Compliance Officers of the U.S. Department of Labor, Occupational Safety and Health Administration.

ZOOLOGY

Edmund D. Brodie, Jr. (Asst Prof) received a research grant of \$2000 for one year from the Penrose Fund of the American Philosophical Society to study the Evolution of Defensive Behavior and Noxious Skin Secretions in Salamanders.

BELLE W. BARUCH RESEARCH INSTITUTE

The Belle W. Baruch Research Institute in Forestry, Wildlife Science and Marine Biology will feature two speakers on the Clemson campus as part of the Institute's visiting lecture series. Dr. D. M. Benjamin, Professor of Forest Entomology at the University of Wisconsin, will lead a seminar entitled, "Advances in the Study of Feeding Behavior of Neodiprion Sawflies," March 20 at 4:00 p.m. in Room 201 of the Kinard Physics Lab. An 8:00 p.m. general lecture, "Alternatives to Pesticides in Forest Insect Management," will be given that night in the same room. Dr. Benjamin's visit is co-sponsored by the Dept. of Entomology and Economic Zoology.

Dr. I. Lehr Brisbin, Assistant Professor in the Institute of Ecology at the University of Georgia will be featured March 27 at 4:00 p.m. in a seminar, "An Ecological Approach to Gamma Radiation Effect Studies on Wild and Domestic Birds," in Room 201, Kinard Physics Lab. An 8:00 p.m. general lecture, "The Ecology of Domestication," will be presented that night, also in Room 201. The Departments of Zoology, Poultry Science and Entomology and Economic Zoology are co-sponsoring Dr. Brisbin's appearance.

STATUS OF APPLICATIONS TO GRADUATE SCHOOL AS OF MARCH 1, 1972
FOR ADMISSION IN AUGUST 1972

MAJOR FIELD	NO. APPLTNS.	ACCEPTED	AV. GRE	AV. GPR	ACTIVE
Agricultural Economics	8	2		3.16	5
Agricultural Engineering	4	1	1400	3.09	3
Agronomy	5				5
Animal Physiology	1				
Animal Science	2				2
Entomology	9				8
Horticulture	4	3	1170	3.49	1
Plant Pathology	2				2
Plant Physiology	1				1
Poultry Science	1				1
Wildlife Biology	3	1	950	2.47	2
Architecture	2				2
City and Regional Planning	3				2
Visual Studies	2				2
Education Non Degree	1	1			
Education Administration & Supr.	3	2		2.85	
Elementary Education	2	2	980	2.99	
Industrial Education	3	1		3.02	2
Personnel Services	9	4		3.16	5
Reading	2				2
Secondary Education	14	6	1130	3.13	5
Bioengineering	12	3	1265	2.98	8
Ceramic Engineering	2	2	1295	3.82	
Chemical Engineering	46	14	1231	3.26	25
Civil Engineering	12	6	1074	3.14	5
Electrical Engineering	19	6	1136	3.09	11
Engineering Mechanics	2	1	1120	3.13	1
Environmental Systems Engineering	24	6	1132	3.12	18
Materials Engineering	4				3
Mechanical Engineering	8	3	1200	2.95	4
Systems Engineering	4	1	1060	3.68	3
Water Resources Engineering	4	1	1160	2.60	2
Economics	5				5
Engineering Management	11				9
Management	11	3	1095	2.94	6
Textile and Polymer Science	3	1			1
Textile Chemistry	6	2	1120	3.05	3
Textile Science	8	1	1080	3.31	6
English	8	4	970	3.58	4
History	5	2	1245	3.08	3
Biochemistry	1				1
Botany	4				4
Chemical Physics	1				
Chemistry	12	2	1065	2.87	10
Mathematics	93	26	1107	3.47	64
Microbiology	7	2	1160	3.22	5
Physics	10	2	1050	2.98	8
Zoology	22				21
Forestry	2	1	1200	2.77	1
Recreation & Park Administration	11	6	1130	2.97	3
TOTALS	438	118	1137	3.21	284

STAMEY TRANSFERS TO LIVESTOCK-POULTRY HEALTH DIVISION (COLUMBIA)

Effective March 1, William J. Stamey, who has served as Insurance Assistant in the Personnel Division for more than 10 years, has been transferred at his own request to the Division of Livestock and Poultry Health, located near Columbia, where he is now the Administrative Assistant. His address is P.O. Box 1771, Columbia, S.C. 29211, and his office telephone number is 788-2260.

Until further notice, all Workmen's Compensation reports should be forwarded to Mr. Walter E. Berry, University Safety Coordinator, a member of the staff in the Personnel Division (Tillman Hall), telephone number 646-2426. Any questions about group insurance or tax-sheltered annuities should be referred to Mr. John B. Gentry, Personnel Director.

CALENDAR OF CAMPUS EVENTS

March 15	Wed.		Baseball - at Kansas City Royals Academy.
March 16	Thurs.		Baseball - at Kansas City Royals Academy.
March 17	Fri.		St. Patrick's Day.
March 17	Fri.		Baseball - at Georgia Southern.
March 18	Sat.		Baseball - at Georgia Southern.
March 18	Sat.		Outdoor track - University of North Carolina at Chapel Hill, N.C.
March 20	Mon.		Classes resume.
March 20	Mon.		Baseball - Ohio University at Clemson.
March 20	Mon.	7:00 p.m.	Foreign film, The Girl with the Golden Eyes (French) - Daniel Hall Theatre - free.
March 20	Mon.	12:15 p.m.	Dr. H.W. Wells of the Georgia Coastal Plains Experiment Station will present a seminar "Biological Control of Plant Pathogens" in 222 Long Hall -- Dept. of Plant Pathology and Physiology Seminar.
March 21	Tues.		Clemson Area Continuing Education Classes.
March 21	Tues.		Baseball - Ohio University at Clemson.
March 22	Wed.		Outdoor track - East Tennessee State University.
March 22- March 23	Wed.- Thurs.		Continuing Education seminar, "Do You Need Operations Research and Systems Engineering?", Clemson Room, Clemson House, sponsored by Dept. of Electrical and Computer Engineering.

CALENDAR OF CAMPUS EVENTS Continued

March 22	Wed.	7:30 p.m.	Dr. John W. Harrington, Professor and Chairman of the Department of Geology at Wofford College, will speak on "Understanding Geology," 235 Brackett Hall.
March 23	Thurs.	4:00 p.m.	ESE Spring 1972 Seminar - Tom Broadwell, "Factors Affecting Phytoplankton Productivity in Lake Hartwell Near Clemson, South Carolina" -- George Fletcher, "Industrial Water Recirculation" -- 302 Rhodes Engineering Research Center.
March 23	Thurs.	4:30 p.m.	Professor M.A. Ogliaruso, Dept. of Chemistry Virginia Polytechnic Institute Probable Title: "Past, Present and Future of Homoaromaticity" -- Chemistry Seminar, Room 131 Brackett Hall.
March 24- April 23	Fri.- Sun.		Architectural Exhibit - "Recent Work By Sculptor John Acorn" -- Lee Gallery.
March 24- March 26	Fri.- Sun.		Food Industries Auditorium - "The Egg and Art Exhibition."
March 24- March 25	Fri.- Sat.		Outdoor track - Florida Relays.
March 25	Sat.		Baseball - Duke at Clemson.
March 25	Sat.		Architectural School Aptitude Test.
March 26	Sun.		Palm Sunday.
March 26	Sun.		Baseball - Duke at Clemson.
March 27	Mon.		Baseball - Duke at Clemson.
March 28	Tues.		Clemson Area Continuing Education Classes.
March 29	Wed.		Baseball - University of South Carolina at Clemson.
March 29	Wed.		Continuing Education seminar, "Solid State Controls for Motors and Other Devices," Clemson Room, Clemson House, sponsored by Department of Electrical and Computer Engineering.
March 30	Thurs.	4:00 p.m.	Student Project - ESE Spring 1972 Seminar - 302 Rhodes Engineering Research Center.
March 30	Thurs.	4:00 p.m.	Zoology Seminar - Dr. Frederick Harrison, Department of Biology, Presbyterian College, will speak on "Developmental Cytology of Freshwater Sponges." Room 330, Long Hall - visitors are welcome.
March 31	Fri.		Baseball - at University of North Carolina.

PROCEDURES FOR SUBMITTING NEWSLETTER MATERIAL

All Calendar items of campus events (speakers, films, meetings, seminars, sporting events, etc.) should be submitted by written memorandum directly to the Office of Public Relations, Trustee House. Information and news items from the Office of the President, Vice President for Business and Finance, Vice President for Executive Affairs, Vice President for Student Affairs and the Vice President for Development should be submitted by written memorandum to the Office of Public Relations, Trustee House. Information and news items from all areas under the Vice President for Academic Affairs should be submitted by written memorandum to Dr. Claud B. Green, Room 28, Tillman Hall.

The following deadlines prevail: Items to appear in the Newsletter published the 1st of each month must be submitted by the 20th of the previous month; items to appear in the Newsletter published the 15th of each month must be submitted by the 5th of each month.

CLEMSON

NEWSLETTER

INFORMATION FOR THE STAFF OF CLEMSON UNIVERSITY

Vol. 11 No. 16

April 1, 1972

UNIVERSITY RECEIVES \$225,205 IN GRANTS AND CONTRACTS

Clemson University has received \$225,205 in research and educational grants and contracts during the past three months. The funds will support a variety of programs and research, including a seminar on decision making for health and hospital administrators, and a continuing investigation into the use of radar to forecast large migrations of birds which are potential hazards to flying aircraft.

Among the major grants are:

-- \$61,438, U.S. Army Research Office, Durham, N.C., to Dr. A.L. Laskar, physics department, for a three-year study of the transport properties in alkali-azides.

-- \$57,572 under Title I of the 1965 Higher Education Act for three projects: "A Dramatic Arts Workshop for Park and Recreation Personnel" (\$5,192); "Occupational Safety and Health Workshops for State and Local Government Employees" (\$34,662); and "Strategies for Urban Development" (\$17,718), which will investigate solutions to various urban problems in the Greenville metropolitan area.

-- \$47,000, National Science Foundation, to support eight continuing graduate traineeships for studies during the 1972-73 academic year. The award provides a \$3,000 stipend per year for each student, and a cost of education allowance to the university in place of tuition and fees.

PLANNING TO RETIRE THIS YEAR?

Any Clemson University employee who is considering retirement -- even tentatively -- on or before June 30, 1972, should advise John B. Gentry, the University Personnel Director, in writing of this possibility not later than Monday, April 10th. This is especially important for those who are not yet 65 years of age. The Personnel Director is currently collecting information on optional retirement benefits for each employee whose record shows a date of birth prior to July 1, 1907, but those who were born later are not on his list for planning conferences.

Unnecessary loss of benefits can result from late applications. To be safe, inquiries about retirement benefits and the available options should be initiated by each employee approximately 90 days in advance of the actual date of retirement. Such inquiry does not obligate anyone to retire before his normal retirement date (at age 65).

Information for Mr. Gentry should be addressed: Personnel Office, Tillman Hall. His telephone is 656-2426.

REPORT OF THE UNIVERSITY COMMITTEE FOR THE IMPROVEMENT OF UNDER-GRADUATE TEACHING

Much of the effort of the Committee during the current academic year has been applied to teacher evaluation. The regularly scheduled student evaluation of undergraduate teachers was administered during the week of November 19, 1971. Both the questionnaire and the procedure were the same as have been used in previous evaluations; however, it is anticipated that significant changes will be made prior to the next evaluation. Toward this end the Committee has been considering a variety of possible revisions of the questionnaire as well as several possible alterations in the handling and distribution of the evaluation results. In principle, the Committee favors wider distribution of the results. Several plans for making the results available to department heads, deans, and the general student body are being considered.

The Committee is also interested in assisting teachers by identifying and attempting to alleviate situations which impede or limit undergraduate teaching effectiveness. In recent years this has been partially accomplished by the use of faculty forms moderated by the Committee. These were held on an individual college basis with one college being covered each year. This method has now been abandoned in favor of a university-wide questionnaire covering a number of possible problem areas. It is hoped that this questionnaire will be ready for distribution by the end of March, 1972.

MINUTES OF UNIVERSITY LIBRARY COMMITTEE MEETING, FEBRUARY 1, 1972

Present: M. W. Jutras (Chairman), Elizabeth Galloway, Ralph Knowland, David Rowe (Student Senate), R. E. Schoenike, M. D. Sherrill, D. B. Stafford, J. M. Wannamaker, H. H. Wilson, J. W. G. Gourlay (Secretary).

1. Minutes of the meeting of January 18 were approved.
2. Mr. Gourlay reported on visits to the library of
 - (a) The Governor's Management Review Commission
 - (b) Board of Visitors
3. There were not any Ad Hoc Committee Reports.
4. Discussion took place on the following:
 - (a) Evaluation by department of the various library collections to ascertain which volumes should be put into storage, or weeded from the collection. Dr. Jutras indicated that he would make a survey of departmental representatives to the library and ask for their suggestions.

MINUTES OF UNIVERSITY LIBRARY COMMITTEE MEETING, FEB. 1, 1972 (Continued)

- (b) The cutting of pages from journal articles or theft of journals. Dr. Jutras appointed Dr. Schoenike to look into the problem.

5. Time of next meeting: Tuesday, March 7, 3:30 p.m.

SCHOLARSHIPS AND AWARDS COMMITTEE MEETING

1. The fourth meeting of the Scholarships and Awards Committee for 1971-72 was held in Room 205 Strode Tower at 1:30 p.m., Thursday, March 2. Present: Norman Olsen, Jr., Chairman, P. A. Steiner, Susan Rockwell, N. R. Bauld, R. H. Hunter, J. R. Warner, W. C. Whitten, A. M. Bloss, G. E. Coakley, Susan Delony, K. N. Vickery, Carl M. Poe and Jerome C. Wells.
2. Minutes of the meeting of January 20 were approved.
3. The records of potential Poole Scholars were reviewed and the top ten were selected by ballot. An alumnus will be asked to comment on each.

Susan Emerson Sewell	Decatur, Ga.	Psych
Harriet Tolbert Hutto	Columbia	Engl
Ronald Martin Watts	Evans, Ga.	ME
Stephen Arthur Yost	Summerville	Physics
Elinor Jane Workman	Wilson, N. C.	Math
Rebecca Lynn Tolley	Doraville, Ga.	El Ed
Patricia Konzian Crosby	Augusta, Ga.	Pre-Arch
Sandra Gail Powell	Greenwood	Chem
Ellen Jean Graef	Poynette, Wisc.	Med Tech
Mark James Bolzan	Anderson	Chem

4. Annie Bailes Brown (Clemson GPR 4.00) was approved to receive the AAUW Award for 1972.
5. The following were selected to receive the Algernon Sydney Sullivan Awards for 1972:

Non-Student Award	Mrs. Gertrude Ramsay Bailey
Student Award	Joseph Fletcher Anderson, Jr.

6. Dr. Bauld, Prof. Rockwell and Dr. Whitten agreed to serve as a committee, chaired by Dr. Bauld, to prepare a plan for use of the interest on the Daniel Memorial Fund. This plan will then be forwarded to President Edwards for his consideration and that of the Board of Trustees.

SCHOLARSHIPS AND AWARDS COMMITTEE MEETING (Continued)

7. The following were approved to receive awards on Honors and Awards Day:
- | | |
|---|----------------------|
| Ben E. Goodale Sophomore Dairy Award | Mack Greer Eubanks |
| Howard Carlisle Copeland Memorial Award | William Pearce Yates |
| Willie N. and Joe Wise Padget Award | William Keith Gibson |
8. The chairman suggested listing in the Honors and Awards Day Program, under each college and school, the students participating in the Honors Program during 1971-72. If no serious objections are received, this recognition will be given those students.
9. The Alpha Lambda Delta Book Award for 1972 will be given to Blanche Elizabeth Coleman and will appear under the College of Physical, Mathematical, and Biological Sciences in the Honors and Awards Day Program.
10. The meeting was adjourned at 3:30 p.m.

CHEMISTRY

Recent publications: F. J. Lindstrom (Prof) and Joe B. Davis (former Grad Stu, Assoc Prof, Winthrop College), "Spectrophotometric Microdetermination of Sulfate," Analytical Chemistry, 44, 524 (1972).

J. W. Huffman (Prof) and J. J. Starnes (former Grad Stu), "The Friedel-Crafts Reaction of 3,4,4-Tri-methylbutyrolactone and Benzene," J. Org. Chem., 37, 487 (1972).

J. W. Huffman and T. M. Hsu (former Grad Stu), "A One Step Synthesis of Flindersine," Tetrahedron Lett. 141 (1972).

COLLEGE OF ENGINEERING

L. G. Rich (Dean) was a member of an Engineers' Council for Professional Development Inspection team which reviewed engineering programs at Vanderbilt University, Nashville, Tenn., on Mar. 12-14.

ELEMENTARY AND SECONDARY EDUCATION

Chester R. Freeze (Prof) was elected President of the Dept. of Higher Education of the SCEA for 1972-73 at the spring meeting in Columbia.

Harold F. Landrith (Dean) addressed the Dept. of Higher Education of The SCEA at the spring meeting on the topic "Higher Education for the Eighties."

COLLEGE OF ARCHITECTURE

John Acorn (Assoc Prof), Tom McPeak (Assoc Prof and Hd of Dept of History and Visual Studies) and Tom Turner (Instr) have been invited to exhibit their creative works in the South Carolina Association of Schools of Art Faculty Exhibit. The Exhibition will tour the state in the coming year.

Vernon Hodges (Prof) attended the annual meeting of the Society of Architectural Historians in San Francisco and a special meeting of the National Preservation Committee. Professor Hodges is the South Carolina representative to the National Preservation Committee.

Joseph L. Young (Prof) attended the South Carolina Chapter AIA meeting in Charleston Feb. 24-26, and presented his final report as President of the Chapter.

Sam Wang (Assoc Prof) has a one-man exhibit at the Greenville County Museum of Art. The exhibit consists of 60 photographs and photoserigraphs and is showing from March 5 to April 7. Professor Wang has also recently been named to serve on the Film Advisory Board of the South Carolina Arts Commission.

A. J. Kaufman (Assoc Prof) delivered a series of lectures on architecture to a humanities class at Hanna High School, Anderson, during the week of Mar. 13-17.

Thomas E. McPeak (Hd, Dept of History and Visual Studies) attended the Advisory Panel Committee meeting of the South Carolina Arts Commission in Columbia, Mar. 10. Professor McPeak also attended the annual (SCASA) South Carolina Assoc. of Schools of Art meeting Mar. 11 in Columbia.

Tom Turner, Ceramic Art Instructor for the College of Architecture, Dept. of History and Visual Studies, is currently representing Clemson in the 9th Annual Piedmont Crafts Exhibition at the Mint Museum of Art, Charlotte, N.C. The show is open to artists residing in the Piedmont and is one of the largest juried shows in the Southeast.

From the eleven eligible states, 259 artists submitted 468 entries. Of these, 85 artists were chosen from eight states to display 106 entries. Mr. Turner has two pieces being exhibited and is one of two artists representing South Carolina. This is Mr. Turner's third consecutive year to be exhibiting in the Piedmont Exhibition. On Mar. 23-26 Mr. Turner attended the annual conference of the National Council for the Education of Ceramic Arts (NCECA) to be held in Gatlinburg, Tenn. He will participate on a panel concerning contemporary use of Salt Glazing.

COLLEGE OF ENGINEERING - Continuing Education

A symposium on "Materials and Design Considerations for the Attachment of Prostheses to the Musculo-Skeletal System" will be presented April 3-7, at Clemson House. This fourth in a series of Bioengineering Symposiums is sponsored by the Division of Interdisciplinary Studies, College of Engineering, Clemson University; The Medical University of South Carolina; the Office of Naval Research of Washington, D. C.; and the National Science Foundation of Washington, D.C.

Presenting papers will be Samuel F. Hulbert (Assoc Prof and Hd - DIS) Symposium Director, Ralph B. Leonard (Asst Prof - DIS), Jerome J. Klawitter (Asst Prof - DIS), Barry W. Sauer (Asst Prof - DIS), Francis W. Cooke (Assoc Prof - DIS), and David D. Moyle (Asst Prof - DIS). Thirty-three other speakers from universities, industries or firms, or private practices will present papers. President Robert C. Edwards will officially welcome the symposium speakers and participants at a luncheon to be held on April 3.

Additional information may be obtained from Dr. S. F. Hulbert, Symposium Director, 301 Rhodes Engineering Research Center or Prof. R. A. Banister, Director, Continuing Education, College of Engineering, 116 Riggs Hall.

ENGINEERING MECHANICS

E. Harry Law (Asst Prof) presented an invited lecture on High Speed Train Dynamics on Mar. 21 for the New York University seminar series on High Speed Ground Transportation.

ENGLISH

C. B. Green (Prof and Dean of Undergraduate Studies) spoke at the Phi Kappa Phi initiation held at Winthrop College on March 6. The topic of his address was "Southern Literature: The Problem of Definition."

FOOD SCIENCE

M. G. Johnson (Asst Prof) presented a paper co-authored by J. C. Acton (Asst Prof) entitled "Growth of Pediococcus cerevisiae in Summer Sausage" at the spring meeting of the South Carolina Branch of the American Society for Microbiology held Mar. 3 at the Clemson House. M. G. Johnson also served as chairman of the afternoon technical session.

HORTICULTURE

The following presentations were made by departmental staff at the 31st Annual Convention of the National Peach Council, held at Atlantic City, N.J., Feb. 20-23:

"The peach situation in South Carolina," by Roy J. Ferree (Assoc Prof).

"The influence of Alar on uniform maturity of peaches for mechanical harvesting," by C. E. Gambrell, Jr., (Asst Prof).

"High density planting, training and pruning peaches for high production and mechanical harvesting," by C. E. Gambrell, Jr.

"Effects of ethephon on uniform maturity of peaches for mechanical harvesting," by E. T. Sims, Jr. (Assoc Prof).

J. P. Fulmer (Asst Prof) was chairman of the Executive Committee of the Southern Region, American Society for Horticultural Science during the past year.

The following papers were presented at the recent meeting of the Southern Region, American Society for Horticultural Science, held in Richmond, Va.

"Effects of five fertilizer treatments on growth and flowering of five Azalea obtusum varieties," by J. P. Fulmer (Asst Prof) and Emory Jones (Instr).

"Response of peaches to chemical thinners in South Carolina during 1971," by C. E. Gambrell, Jr. (Asst Prof), G. E. Stembridge (Assoc Prof), and E. T. Sims, Jr. (Assoc Prof).

"Effects of temperature and daylength on the production and quality of carnations," by C. R. Johnson (Asst Prof).

"Responses of centipedegrass (Eremochloa ophiuroides) to various rates of N, P, and K in sand culture," by H. M. DuBose (Grad Res Asst) and F. B. Ledebouer (Asst Prof).

"Effects of early cutting treatments and fertilization on densely seeded turfgrasses in the greenhouse," by F. B. Ledebouer.

"Horticulture teaching - past, present, and future," was presented by E. T. Sims, Jr. for T. L. Senn (Prof and Hd) in a special session on Views on Quality of Instruction in Undergraduate Horticulture.

"Quality and storage life of mechanically harvested tomatoes for fresh market," by E. T. Sims, Jr., C. E. Hood (Assoc Prof of Agr Eng), and B. K. Webb (Assoc Prof of Agr Eng). "Quality and storage life of mechanically harvested peaches for fresh market," by E. T. Sims, Jr., B. K. Webb and C. E. Hood.

"Effects of succinic acid-2, 2-dimethylhydrazide (SADH) on color and firmness uniformity of peaches," by G. E. Stembridge (Assoc Prof), R. A. Baumgardner (Assoc Prof), L. O. Van Blaricom (Prof) and C. E. Gambrell, Jr. (Asst Prof).

Peach maturation and fruit abscission as influenced by time of ethephon application," by G. E. Stembridge, and C. E. Gambrell.

"The effect on storage life of peaches from trees treated with succinic acid-2, 2-dimethylhydrazide (SADH)," by L. O. Van Blaricom, and R. A. Baumgardner.

LANGUAGES

Patricia W. Wannamaker (Assoc Prof) was elected President of the Clemson Chapter of the National Honor Society of Phi Kappa Phi for the year 1972-73.

The Department of Languages at Clemson is organizing a drama competition, DIONYSIA 72, for foreign language students. Numerous regional universities are expected to participate in this event. Activities will begin on Friday, April 14, 1972, at 4:00 p.m. with an open house in Strode Tower Lounge, Second Floor. This will be followed by a banquet at Schilleter Hall (only \$3.25 per person). At 8:00 p.m. in Tillman Hall, the speaker for this occasion will be Eric Bentley (admission free). At 9:00 p.m. in Tillman Hall, the Furman Theatre Guild will present two plays in English - Mrozek's Strip Tease and Beckett's Play (admission free). All day Saturday, April 15, the visiting students will compete in selections from various foreign plays.

9:00 a.m. French - Daniel Auditorium
Russian - McAdams Auditorium
Spanish - Food Industries Auditorium

1:15 p.m. French - Daniel Auditorium
German - McAdams Auditorium
Spanish - Food Industries Auditorium

The event will be concluded with an awards ceremony at 6:00 p.m. in Daniel Auditorium. Everyone interested in drama or foreign languages is welcome to attend all of these activities. For further information please contact the Dionysia Committee, Department of Languages, Strode Tower, Room 201 or phone 656-3393.

LIVESTOCK-POULTRY HEALTH DEPARTMENT

Dr. Thomas H. Eleazer (Vet II) attended the 26th annual meeting of the Animal Disease Research Works in the Southern States and the 14th Annual Southern Conference on Avian Diseases held on Mar. 16-17 at Texas A&M University at College Station. Dr. Eleazer presented papers entitled, "Meldane as a Treatment for Capillaria contorta Infection in Turkeys," and "Anatipestifer Infection in Semi-Wild Mallard Ducks in South Carolina," Thomas H. Eleazer, H. Gaffney Blalock, J. Selvin Harrell and W. T. Derieux.

MATHEMATICAL SCIENCES

William H. Ruckle (Assoc Prof) translated "Nuclear Locally Convex Spaces," from the German Edition by Albrecht Pietsch. This translation is published in book form by Springer-Verlag in the series Ergebnisse der Mathematik as Band 58.

MATHEMATICAL SCIENCES (Continued)

William H. Ruckle (Assoc Prof) recently published "The Densor Product of Complete Biorthogonal Sequences," in Duke Mathematical Journal, Vol. 38, No. 4 (1971).

Joel V. Brawley, Jr. (Assoc Prof), a member of the Visiting Lecturer Panel of the Mathematical Association of America, presented two lectures and a seminar at Presbyterian College on Jan. 27-28. The Visiting Lecturer Program of the M.A.A. is funded by the National Science Foundation.

Recently published papers include: Khursheed Alam (Assoc Prof), "A Selection Procedure Based on Ranks," Ann. Inst. Stat. Math., Vol. 23:253-262 (with James R. Thompson); K. Alam, "Selection from Poisson Processes," Ann. Inst. Stat. Math., Vol. 23, No. 3; and W. R. Boland (Asst Prof), "Product-type Quadrature Formulas," BIT, Vol. 11:139-158.

K. T. Wallenius (Assoc Prof) recently authored a paper, "A Condition Covariance Formula with Applications," American Statistician, Vol. 25:32-33.

Frank M. Cholewinski (Prof) authored an article in the 24th issue of the Journal D'Analyse Mathematique. The paper was entitled "Expansions in Terms of Laquerre Heat Polynomials and Their Temperature Transforms."

Khursheed Alam (Assoc Prof) and Kenzo Seo (Assoc Prof) authored a paper entitled "A Sequential Sampling Rule for Selecting the Most Probable Multinomial Event," which appeared in the Ann. Inst. Stat. Math., Vol. 23, No. 3 (a coauthor for this paper was James R. Thompson).

D. R. LaTorre (Assoc Prof) had an article, "On Semigroups That Are Semilattices of Groups," published in the Czechoslovak Math. J., Vol. 21:369-370.

John D. Fulton (Assoc Prof) published a paper entitled "Symmetric involutions over fields of characteristic 2," in the Duke Mathematical Journal 38: 697-702. A coauthor for this paper was John C. Perkins.

Paul T. Holmes (Assoc Prof) published a paper entitled "On a property of Poisson processes," in Sankhya Series A 33:93-98.

Khursheed Alam (Assoc Prof) has published a paper entitled "On Selecting the most probable category," in Technometrics 13: 843-848.

Andrew Sobczyk (S Maner Martin Prof) published a paper entitled "Obliquity, Obtusity, and Families of Flats" in the book, Proceedings of the Congruence on Convexity and Combinatorial Geometry, which is published by the University of Oklahoma.

MATHEMATICAL SCIENCES (Continued)

K. T. Wallenius (Assoc Prof) gave a series of lectures at Mars Hill College, Queens College, and Benedict College under the auspices of the Visiting Lecturers in Statistics Program. This program is funded by the National Science Foundation and jointly sponsored by the American Statistical Association, and Institute of Mathematical Statistics and the Biometric Society.

MUSIC

Edmund W. Winston (Instr) presented a seminar/workshop for the annual meeting of the South Carolina Band Directors Association on Mar. 17 at Furman University. The seminar dealt with the production of clarinet tone involving the selection of clarinet mouthpieces and reeds.

Edmund W. Winston and Joseph R. Manson (Asst Prof, Physics) are members of the newly formed Galliard Woodwind Quintet, sponsored by South Carolina Arts Commission. Their first concert was presented to the Greenville Music Club at the Greenville Arts Museum on Mar. 13.

SCHOOL OF NURSING

The School of Nursing is sponsoring a series of seminars related to Nursing Research:

Monday, Feb. 21, 2:30-4:30 p.m. - Dr. Phyllis J. Verhonick, Professor, University of Virginia School of Nursing, "Study of Decubitus Ulcers."

Friday, Mar. 24, 1:30-3:30 p.m. - Miss Julia D. Watkins, R.N., M.P.H., Associate Professor, Public Health Nursing, School of Public Health, University of North Carolina, "Study of the Diabetic Patient."

Friday, Apr. 14, 1:30-3:30 p.m. - Dr. Mary V. Neal, Associate Professor and Chairman of Pediatric Nursing, University of Maryland School of Nursing, "Premature Infant Studies."

These seminars will be held in Room 302, Rhodes Engineering Research Center.

DELTA SIGMA NU BANQUET

Delta Sigma Nu, the Premedical Fraternity of Clemson, will hold its annual banquet at the Coneross Fish Lodge. The guest speaker will be James W. Colbert, Jr., M.D., Vice President for Academic Affairs, Medical University of South Carolina. Cost will be \$3.00 per person. If interested contact: Mike Webb - 656-6656 or Dr. Roy Bailey - 656-3439.

GRADUATE COUNCIL MINUTES, MARCH 10, 1972

The meeting of the Graduate Council was called to order by Dean Schwartz at 3:30 p.m. Members present were: Dr. Camper, Mr. Bostic, Dr. Bolen, Professor Means, Dr. Freeze, Mr. Mims, Dr. Wolla (for Dr. Wolf), Dr. Wooten (for Dr. Allen), and Dr. Lyons. (for Dr. Smith).

The minutes of the February 11, 1972 minutes were approved as distributed.

A subcommittee consisting of Professor Means, chairman, Dr. Camper, and Dr. Freeze was appointed to study the proposal for the establishment of a Master's Program submitted by the School of Nursing.

Dr. Graben presented a report on the proposal for a graduate program in Ocean and Coastal Engineering and made a motion that the program be approved in principle. Dr. Camper seconded the motion and it was passed unanimously.

Dr. Graben made a progress report for the subcommittee on Language Requirements. Mr. Bostic suggested substituting Japanese to satisfy the language requirement in Textiles. He noted that a vast body of literature on textiles is written in Japanese. Methods for assessing competence in the Japanese language was discussed at length. Professor Means suggested that this matter be considered by the subcommittee on Language Requirements. Dean Schwartz indicated that a graduate student will be added to the subcommittee on Language Requirements this fall.

The Graduate Council noted to honor Dr. Allen's request to remove Forestry 607, Elements of Forestry, from the curriculum.

Genetics 601, Genetics, was discussed and Dr. Camper recommended that it be left temporarily in its present status - tabled.

Dean Schwartz administratively approved the following courses:

- Ag M 652 - Farm Power (replacing Ag E 652)
- Ag M 660 - Farm and Home Utilities (replacing Ag E 660)
- Astr 604 - Astrodynamics (replacing Phys 604).

Dean Schwartz requested that Council members remind their respective deans that the deadline for submission of new courses to be taught in 1972-73 academic year was December 15, 1971 for first semester (1972), and is October 1, 1972 for second semester (1973). This will allow all new courses to be included in pre-registration procedures.

There being no further business, a motion was made to adjourn, seconded and carried unanimously.

STATUS OF APPLICATIONS TO GRADUATE SCHOOL AS OF MARCH 20, 1972
FOR ADMISSION IN AUGUST 1972

MAJOR FIELD	NO. APPLTNS.	ACCEPTED	AV. GRE	AV. GPR	ACTIVE
Agricultural Economics	10	2		3.16	7
Agricultural Engineering	4	1	1400	3.09	3
Agronomy	5				5
Animal Physiology	1				
Animal Science	2	1		2.63	
Entomology	10	1		3.14	8
Horticulture	4	3	1170	3.49	1
Nutrition	3				3
Plant Pathology	2				2
Plant Physiology	2				2
Poultry Science	1				1
Wildlife Biology	4	1	950	2.47	3
Architecture	10				10
City and Regional Planning	4				3
Visual Studies	4				4
Education Non Degree	1				
Ed Adm Supr	4	3		2.78	
Elementary Education	2	2	980	2.99	
Industrial Education	5	1		3.02	3
Personnel Services	10	7		3.04	2
Reading	2				1
Secondary Education	15	7	1130	3.22	4
Bioengineering	15	3	1265	2.98	8
Ceramic Engineering	2	2	1295	3.82	
Chemical Engineering	49	17	1215	3.18	22
Civil Engineering	14	6	1074	3.14	6
Electrical Engineering	23	9	1158	3.18	12
Engineering Mechanics	2	1	1120	3.13	1
Environmental Systems Engr.	30	15	1150	3.03	14
Materials Engineering	4				2
Mechanical Engineering	9	3	1200	2.95	4
Systems Engineering	4	1	1060	3.68	3
Water Resources Engineering	5	3	1060	2.86	1
Economics	5				5
Engineering Management	13	1	1080	2.24	8
Management	11	3	1095	2.94	6
Textile & Polymer Science	5	1			2
Textile Chemistry	8	2	1120	3.05	5
Textile Science	11	1	1080	3.31	8
English	9	4	970	3.58	5
History	6	3	1166	3.03	2
Biochemistry	2				2
Botany	6	1	1160		4
Chemical Physics	1				
Chemistry	16	5	1066	3.27	11
Mathematics	110	42	1146	3.42	60
Microbiology	9	2	1160	3.22	7
Physics	13	2	1050	2.98	10
Zoology	24				23
For & Rec (Undeclared)	1				1
Recreation & Park Admin.	14	6	1130	2.97	5
TOTALS	529	164	1146	3.19	301

CLEMSON UNIVERSITY SEA GRANT COMMITTEE

Dr. Victor Hurst, Dean of the University, has appointed two additional members to serve on the University-wide committee, which is preparing a Sea Grant Proposal. Dr. William I. Golden, Extension Service, and Dr. Byron K. Webb, Agricultural Engineering, will assist the present committee members, chaired by Dr. T. L. Senn in the final preparation of the proposal, which is scheduled to be delivered to the National Sea Grant Office by April 1, 1972.

Mr. Harold Goodwin, Deputy Director of the National Sea Grant Program, visited Clemson on Friday, March 3 and commended the Clemson committee on the excellent progress it has made to date in the preparation of this interdisciplinary and interinstitutional proposal. Mr. Goodwin, also, noted that cooperation between participating institutions throughout the State is at a high level for which we as a State are to be complemented. Institutions participating in this proposal are: Clemson University, the University of South Carolina, the Citadel, the Medical University of South Carolina, the College of Charleston, and the Marine Resources Division. The proposal is being coordinated by Dr. Edwin Joseph, Director of the Marine Resources Laboratory, who was recently appointed by Clemson University as Adjunct Professor of Marine Science.

CALENDAR OF CAMPUS EVENTS

April 1	Sat.	Baseball - at University of North Carolina.
April 1	Sat.	Outdoor Track - State-Record Relays.
April 2	Sun.	Easter Sunday.
April 2	Sun.	Baseball - at North Carolina State University.
April 3- April 7	Mon.- Fri.	The fourth in a series of Bioengineering symposiums on 'Materials and Design Considerations for the Attachment of Prostheses to the Musculo-Skeletal System' at Clemson House.
April 4	Tues.	Clemson Area Continuing Education Classes.
April 5	Wed.	Honors and Awards Day - classes suspended at 12 noon.
April 5	Wed.	Baseball - at University of South Carolina.
April 6	Thurs.	8:00 p.m. Graduate wives' monthly meeting -- YMCA.
April 6	Thurs.	4:00 p.m. ESE Spring 1972 Seminar - Carmen F. Guarino, Deputy Commissioner, Water Dept; Philadelphia, Pa. -- "Towards Computer Control of Wastewater Treatment" -- 302 Rhodes Engineering Research Center.

CALENDAR OF CAMPUS EVENTS Continued

April 7	Fri.		Baseball - Wake Forest at Clemson.
April 8	Sat.		Baseball - Wake Forest at Clemson.
April 8	Sat.		Outdoor Track - Duke.
April 9	Sun.		Baseball - Georgia Tech at Clemson.
April 10- April 15	Mon.- Sat.		Clemson Week Around the World.
April 10	Mon.	8:00 p.m.	Clemson University Concert Series - Gershon Kingley's First Moog Quartet - Littlejohn Coliseum.
April 11	Tues.		Clemson Area Continuing Education Classes.
April 11	Tues.		Honors and Awards Day (Military).
April 11	Tues.		Baseball - at Georgia.
April 12	Wed.		Outdoor Track - University of South Carolina.
April 13	Thurs.	4:00 p.m.	ESE Spring 1972 Seminar - Ken Tracy, "Sedimentation and Thickening of Activated Sludge" -- 302 Rhodes Engineering Research Center.
April 14	Fri.		Dionysia 72
		4:00 p.m.	Open House, Strode Tower, Lounge, Second Floor.
		6:00 p.m.	Banquet, Schilletter Hall.
		8:00 p.m.	Speaker, Tillman Hall Auditorium
		9:00 p.m.	Furman Theatre Guild presents Mrozek's <u>Strip Tease</u> and Beckett's <u>Play</u> , Tillman Hall Auditorium.
April 14	Fri.		Baseball - North Carolina State at Clemson.
April 15	Sat.		Baseball - North Carolina State at Clemson.
April 15	Sat.		Outdoor Track - at Georgia.
April 15	Sat.		Graduate School Foreign Language Test.
April 15	Sat.		Dionysia 72 - Student competition
		9:00 a.m.	French - Daniel Auditorium
			Russian - McAdams Auditorium
			Spanish - Food Industries Auditorium
		1:15 p.m.	French - Daniel Auditorium
			German - McAdams Auditorium
			Spanish - Food Industries Auditorium
		6:00 p.m.	Awards and Prizes, Daniel Auditorium.
April 16	Sun.		Baseball - University of North Carolina at Clemson.

PROCEDURES FOR SUBMITTING NEWSLETTER MATERIAL

All Calendar items of campus events (speakers, films, meetings, seminars, sporting events, etc.) should be submitted by written memorandum directly to the Office of Public Relations, Trustee House. Information and news items from the Office of the President, Vice President for Business and Finance, Vice President for Executive Affairs, Vice President for Student Affairs and the Vice President for Development should be submitted by written memorandum to the Office of Public Relations, Trustee House. Information and news items from all areas under the Vice President for Academic Affairs should be submitted by written memorandum to Dr. Claud B. Green, Room 28, Tillman Hall.

The following deadlines prevail: Items to appear in the Newsletter published the 1st of each month must be submitted by the 20th of the previous month; items to appear in the Newsletter published the 15th of each month must be submitted by the 5th of each month.

CLEMSON NEWSLETTER

INFORMATION FOR THE STAFF OF CLEMSON UNIVERSITY

Vol. 11 No. 17

April 15, 1972

BOARD APPROVES REORGANIZATION, FACULTY MANUAL

At its March 29 meeting in Columbia, the Clemson University Board of Trustees approved a reorganizational structure of the Department of Social Sciences in the College of Liberal Arts. The reorganization calls for the Department of Social Sciences to be disbanded, effective July 1, 1972. Effective the same date, three departments will be established: the Department of History, the Department of Psychology, and the Department of Political Science and Sociology.

Future plans call for the Department of Political Science and Sociology to be divided, effective July 1, 1974, into two departments -- the Department of Political Science and the Department of Sociology.

In other matters, the Board of Trustees

-- approved and adopted the proposed revision of the Faculty manual (dated March, 1972).

-- authorized the Administration to make available to the Clemson Day Care Center four prefab housing units for its work in cooperation with the College of Education, College of Nursing, and the Cooperative Extension Service.

-- amended in its entirety Paragraph 2-5 of the Traffic Code to read as follows: "Any eligible person may register any motor vehicle whether or not such person is the owner of such vehicle, provided the person registering the vehicle is subject to the same eligibility or restrictions for registration as the owner."

-- amended the policy relating to terminal leave (adopted by the Board of Trustees on Nov. 23, 1971), to read as follows: "A regular employee who is separated, regardless of the reason therefor, after completing six months of continuous employment, shall be paid in a lump sum supplement to his final regular payment, the value of annual leave accrued but not taken as of his final day of work; provided, that no such payment for unused annual leave shall exceed the value of the maximum number of days permitted by State Law."

-- authorized the administration to apply to the Department of Housing and Urban Development for a grant of \$40,000 (which will be supplemented by \$23,000 from the University and gifts of plants and materials totaling \$17,000) to develop a Multipurpose Ornamental Horticulture Garden for the Department of Horticulture. The garden will provide a laboratory for students concerned with ornamental horticulture, environmental education and nature study.

SPECIAL DEDUCTION OF SUMMER INSURANCE PREMIUMS FOR TEACHING FACULTY

The last salary check (1/18 of contract salary) for the academic year 1971-72 will be issued on May 5 to each member of the faculty who is paid on an academic-year basis. The Accounting Division will deduct authorized insurance premiums for the months of May, June, and July from the salary checks to be issued on May 5. The August insurance premiums will be deducted from the August 31 salary check (the first check for the 1972-73 academic year).

Any member of the teaching faculty who will not return for the 1972-73 session may continue his insurance coverage through August 31, if he so desires, by delivering a check(s) for the correct amount of the August premium(s) to John B. Gentry, Personnel Director, not later than Friday, May 5, 1972. The check (or checks) should be made payable to the insuring organization; not to Clemson University. Since the checks to cover August insurance premiums will not be presented to banks for payment prior to the end of the month, they may be dated as late as August 31, 1972, if desired.

Any member of the teaching faculty who desires to cancel or reduce his insurance coverage effective in May, June, or July must forward a written authorization to the Personnel Director not later than April 30, 1972.

MATHIS TO SPEAK AT FORT HILL CLUB BANQUET

Bill Mathis, former star fullback for the Clemson Tigers and veteran running back for the New York Jets, will be the featured speaker for the Fort Hill Clemson Club's annual ladies night banquet Saturday, April 22, at the Holiday Inn of Clemson. The festive "Clemson Week Around The World" affair will begin with a poolside social hour at 7 p.m., followed by dinner at 8 p.m.

Tickets are \$6.00 per person and may be purchased by any alumnus or friend of Clemson at the Alumni Office in the Trustee House. No tickets will be available at the door.

Mathis, now a successful New York business executive, will be introduced by his former coach, Frank Howard.

The buffet menu includes prime roast beef au jus, fried shrimp, and Southern fried chicken.

Entertainment will be provided by Ed Freeman at the piano, who will do impressions of Victor Borge and Andy Griffith.

DIRECTORY OF ENVIRONMENTAL CONSULTANTS TO BE PUBLISHED

An annual Directory of Environmental Consultants, will be published beginning in 1972. Environmentally concerned professionals interested in having their name and short resume appear in the Directory should send a No. 10, self-addressed, stamped envelope to: Directory of Environmental Consultants, P.O. Box 8002, University Station, St. Louis, Missouri 73108.

DEPARTMENT OF LANGUAGES PRESENTS "DIONYSIA 72"

Some 30 colleges and universities from a five-state area are expected to participate in "Dionysia 72" April 14 and 15, Clemson's first drama competition for foreign language students. Sponsored by the Department of Languages, "Dionysia 72" centers around student competition in the presentation of several native-language plays in French, German, Russian, and Spanish.

All activities will be open to the public free of charge. Prizes will be awarded both to schools and individuals for outstanding performances. The two-day event begins Friday, April 14, with a keynote address by world-renowned author and drama critic Dr. Eric Bentley. Following the address, the Furman Theatre Guild will present, in English, Mrozek's "Strip Tease" and Beckett's "Play" in Tillman Hall auditorium.

BRUNER, WALKER WIN CONSERVATION AWARDS

The S.C. Wildlife Federation has presented its top 1971 achievement awards in forest conservation and conservation education to faculty members of Clemson University's College of Forest and Recreation Resources. The "Forest Conservationist of the Year" trophy went to Marlin H. Bruner of the forestry department who was cited for significant contributions toward advancement of forest conservation in the state for over 30 years.

Winner of the "Conservation Educator of the Year" award is Sarah A. Walker of Clemson's recreation and park administration department who has been involved with conservation education over the last decade.

The 7th annual conservation achievement program is sponsored by the Sears Roebuck Co., the S.C. Wildlife Federation, and the National Wildlife Federation.

"MUSEUM WITHOUT WALLS" FEATURES PICASSO'S WORKS

A new motion picture covering the major span of Picasso's work, the first of Universal Studios' "Museum Without Walls" art film series, will be shown April 4 and 9 at the University. "Picasso: War, Peace and Love" begins the series of 11 films open to the public that will be shown in five different two-hour programs.

Offered jointly will be "Goya," which features that Spanish artist's major works in Madrid's Prado Museum. The entire program will be shown on campus Tuesday, April 4, at 7:30 p.m. in Holtzendorff YMCA Theater, and again at 2 p.m., Sunday, April 9, in D.W. Daniel Auditorium.

Season tickets for the series are \$6 for students and teachers and \$8 for the general public. Single performance tickets are \$1.50 and \$2. Tickets are on sale at the Box office and at Clemson's Rudolph Lee Gallery.

ACADEMIC CALENDAR SHIFTS ARE TABULATED

A survey of academic calendars at colleges and universities shows a "revolution" taking place, according to a report issued this week by the American Association of Collegiate Registrars and Admissions Officers. The survey, conducted by Loyd C. Oleson, registrar at Doane College, found a growing shift to the Early Semester and 4-1-4 calendars away from the Traditional Semester plan. The survey was conducted between Feb. 8 and Aug. 28, 1971 and received usable reports from 2,475 institutions. As noted in the accompanying table, the survey sought information on the five regular types of calendars. In the table, "previous to 1967-68" means the calendar type used before the change to the 1967-68 type.

		Previous to					
		1967-68	1967-68	1968-69	1969-70	1970-71	1971-72
1.	Traditional Semester	1756	1517	1379	1207	895	637
2.	Early Semester	71	205	308	438	680	860
3.	Quarter	360	467	514	535	539	542
4.	Trimester	81	86	79	75	73	77
5.	4-1-4	6	39	75	118	186	236
6.	"Other"	42	64	72	87	102	123

HANDBALL COURTS INCLUDED IN FIKE FACILITIES

Ten handball courts have been included in revised plans for renovation and addition of new facilities to Fike Recreation Center. The project, already under construction, launches Phase I of Clemson's university union program, designed to meet the needs of a projected student body of 10,000 together with faculty and staff members. Phase I, the physical training-intramural portion of the program, includes construction of a swimming pool, diving pool, and renovation of the present large gymnasium.

COMMITTEE APPOINTED TO ADVISE IN THE SELECTION OF DEAN OF COLLEGE OF AGRICULTURAL SCIENCES

Dr. Victor Hurst, Dean of the University, has appointed a faculty committee to advise his office in the selection of a person to fill the position of Dean of the College of Agricultural Sciences. The committee members are as follows:

Professor B. L. Cunningham, State Leader, Extension Special Programs
Dr. Thomas H. Eleazer, Clemson Livestock-Poultry Health Department
Dr. Thomas H. Garner, Department of Agricultural Engineering
Dr. James Riley Hill, Department of Animal Science
Professor Marie S. Hindman, Extension Specialist
Dr. J. B. Kissam, Department of Entomology and Economic Zoology
Dr. Harold L. Musen, Edisto Experiment Station
Dr. B. J. Skelton, Department of Horticulture
Dr. J. M. Stepp, Department of Agricultural Economics

At a meeting on March 23, 1972, the committee elected Dr. Thomas H. Garner to serve as Chairman.

The committee has invited members of the faculty and staff of the College of Agricultural Sciences to submit nominations of persons to fill the position.

FINAL EXAMINATIONS

At the request of the Faculty Senate, the following reminder is given to all teaching faculty. According to University regulations, (p. 116 of the 1971-72 Clemson University Announcements in the section labelled "Semester Grades") faculty are required to give final examinations to all students with a grade below A. The regulation reads:

Faculty members may excuse from the final examinations all students having the grade of A on the work of the course prior to the final examination, but for all other students written examinations are required in all subjects at the end of each semester, except in certain laboratory or practical courses in which final examinations are not deemed necessary by the departmental faculty.

Complaints forwarded to the Faculty Senate pointed out that many teachers were exempting from final exams students whose class averages were secure, but at grades lower than A. Certain other teachers were giving no final exams to entire classes, but on other grounds.

The Senate's Admissions and Scholarship Committee felt that uniform enforcement of this University-wide policy would alleviate many student complaints, as well as faculty dissatisfaction with colleagues from other departments.

SCHOLARSHIPS AND AWARDS COMMITTEE MEETING

1. The fifth meeting of the Scholarships and Awards Committee for 1971-72 was held in Room 205 Strode Tower at 1:30 P.M., Friday, March 24. Present: Norman Olsen, Jr., Chairman, J. D. Davenport, R. H. Hunter, J. T. Lazar, J. R. Warner, H. E. Morgan, W.C. Whitten, A. M. Bloss, K. N. Vickery, C. M. Poe.
2. Procedures for obtaining Poole Scholars were discussed. It was suggested that alumni be written regarding the entire list of Poole potentials as soon as that list is generated.
3. Plans for the Honors and Awards Day luncheon were reviewed. The chairman will assign seats at the luncheon to members of the committee. Mr. Poe will have a seating chart to help committee members locate their places. Name tags will be supplied to members of the committee to help identify them for parents.
4. The chairman asked that the committee members ask their college and school committee members to help host the receptions following their convocations so that visitors may be made to feel at home.
5. Colonel Bloss explained current scholarship selection procedures.
6. The committee voted to divide the \$1500 unrestricted gift from the Owens-Corning Fiberglas Corporation into three \$500 non-renewable scholarships to be given to rising sophomores without further restrictions.
7. Keith Hayne Griffith was approved to receive the J. H. Cochran Entomology Award.
8. CIBA-Geigy has given permission to increase their scholarships to two of \$500 each in the future.
9. The committee confirmed the proposed Agricultural Engineering Scholarship.
10. Dr. Whitten reported that the Industrial Management and Textile Science Committee recommended that income from the fund established by the Norris family will be used to provide three \$800 scholarships for incoming freshmen in Industrial Management and Textile Science, according to the provisions stated in the will. The committee accepted this recommendation.
11. The meeting was adjourned at 2:30 P.M.

MINUTES OF THE MEETING OF THE FACULTY SENATE, FEBRUARY 8, 1972

The meeting was called to order by President Sawyer at 4:15 P.M. In editing the minutes of the meeting of January 11, some actions on the proposed resolution relating to recent actions of the Graduate Dean were omitted. The Senate requested that all the actions be reported, and they are as follows:

"Professor J. C. Fanning presented the proposed resolution to the Senate. Professor V. S. Hodges moved to accept the resolution with substitution of the word 'questions' for 'deplores.'. The motion was seconded; there was no vote. There followed a motion by Professor F. J. Keller to reinsert the word 'deplores.'. The motion was seconded and passed by a vote of 12 to 7. Professor J. C. Mullins moved to table the resolution. That motion was seconded but defeated. Professor W. F. Steirer moved to consider the two parts of the resolution separately. That motion was seconded but defeated. The motion, as it now reads in the January minutes, passed by a vote of 17 to 4."

The minutes of the January meeting were approved as amended.

President Sawyer announced to the Senate that Margaret Rice and Linda Skelton from Greenville, Lee Craig and Joe Cameron from Sumter, Harold Musen from Edisto, and John Durant for Pee Dee are the six representatives for this year's off-campus faculty committee. She also announced that the Commission on Higher Education has placed on this year's legislative agenda the recommendation that faculty members of the state's institutions of higher learning be offered the optional alternative of TIAA/CREF for retirement contributions, rather than the present South Carolina Retirement System.

Professor D. R. LaTorre moved "the appointment of a committee of the faculty to pursue appropriate action in support of legislation designed to make available an alternative TIAA retirement plan for the faculty." The motion was seconded and passed by a unanimous voice vote.

President Sawyer announced that a rewrite of the composition of the Computer Advisory Committee, as previously approved by the Senate for inclusion in the faculty manual, would be necessary. The rewrite will be mailed to Senators for a mail-vote. She reported also that the revised faculty manual, as it was approved by the Senate, is in the hands of the Educational Council.

President Sawyer announced that she has continued to follow up the Senate's request for a reduction in the time period for which a student is allowed to drop a course, and that she has been informed that the item is on the agenda for the next meeting of the University Schedule Committee.

MINUTES OF THE MEETING OF THE FACULTY SENATE, FEB. 8, 1972 (Continued)

President Sawyer presented to Senators for confirmation the results of the mail-votes on three items as follows. The Senate voted against inclusion of an extra sentence concerning graduate student welfare in the description of the duties of the Graduate Council (28 to 4) and voted to approve statements providing for selection of graduate student representatives for the Audio-Visual Committee (29 to 0) and Graduate Council (27 to 1) by the Graduate Dean, until such time that a graduate student organization could take over. There was a motion and second to confirm the vote. The motion passed unanimously.

There were no reports from the Policy Committee, Welfare Committee, Ad Hoc Committee B, or Ad Hoc Committee C. Professor F. J. Keller, Chairman of the Admissions and Scholarship Committee, stated that his committee had expressed no sentiment to change the existing policy on the period for allowing a student to drop a course. There followed a motion and second to request that the item be removed from the agenda of the Schedule Committee. Professor V. S. Hodges moved to amend the original motion to call for deferment of consideration by the Schedule Committee for the time being. The amended motion was seconded and approved by a voice vote.

Discussion indicated a continued interest among Senators on the problems relating to student withdrawal from courses: for example, students intentionally registering for an overload only to drop courses later, and the irregular and inconsistent manner in which Withdraw-Passing and Withdraw-Failing designations are handled by individual faculty members. President Sawyer stated that she has been informed that an advisor's manual is to be prepared and will contain guidelines which might alleviate part of the first problem. Professor D. R. LaTorre pointed out that items for which Senate concern had been expressed in the past, such as the item on withdrawal from courses, should not be dropped just because the interest is presently not as strong. The point was well taken.

Professor N. D. Camper, Chairman of the Research Committee, reported the following information obtained from inquiries about a Clemson University representative in Washington. The State of South Carolina is presently represented in Washington by Mr. Tom Bendorf, an attorney, who, as part of his duties, represents Clemson University also. Mr. Bendorf will coordinate his efforts for research and/or training grants or contracts through the Office of University Research. Matters pertaining to building funds will be coordinated through the Office of Development. Benefits of this arrangement were pointed out as follows: there will be office space, secretarial assistance, and conference rooms available to individuals from the University when in Washington on official University business; and meetings will be arranged and appointments scheduled with the proper Government personnel. Professor Camper pointed out that initial contact with Mr. Bendorf will need to be made through either the Office of University Research or the Office of Development, whichever is appropriate.

MINUTES OF THE MEETING OF THE FACULTY SENATE, FEB. 8, 1972 (Continued)

Professor J. D. Fulton, Chairman of Ad Hoc Committee A on the faculty club facility, passed to Senators results of the questionnaire recently sent to the faculty. He pointed out that the information indicates mostly a "willingness to pay." While all the information is yet to be analyzed, the results do indicate a positive interest in the club.

President Sawyer passed to Senators, as information, an estimate of the reapportionment of Senate seats based on the number of faculty members in each college.

The first item of new business was the presentation and first reading of two proposed resolutions from the Policy Committee. In keeping with the tripartite structure of the University, that is, teaching, research, and extension, and since 79 persons in the extension program are now of faculty status, the Policy Committee presented the following resolution:

"Resolved that the Constitution and By-Laws of the Faculty and Faculty Senate be amended in those places that now refer to "...the teaching and research faculty ..." to read "...the teaching, research and extension faculty..."

Specific reference was made to the following places: 1) Paragraph 4 of the Preamble to the Constitution should be changed to read "...in matters pertaining to the academic, research, and extension interests of the university..."; 2) Article I, Section 1, which defines the faculty, should be changed to read, "...the teaching, research, and extension faculty with the rank of ..."; 3) Article I, Section 2, which lists functions of the faculty, should be changed to read, "... and the academic, research, and extension policies of the institution..."; 4) Article II, Section 3, which lists functions of the Faculty Senate, should be changed to read, "... to consider policies affecting the academic, research, and extension activities of the university...".

The second resolution read as follows:

"Resolved that: 1) a sixth committee, to be designated the Extension Committee, be added to the standing committees of the Faculty Senate; and 2) the function of the Extension Committee shall be to study and make recommendations on policies, procedures, and practices that are related primarily to extension."

Discussion which followed indicated that a change in wording of the proposals may be necessary before a second reading in the March meeting of the Senate. A number of Senators expressed the feeling that establishing a separate standing committee for extension is not necessary, the feeling being that any area of concern to extension could be properly handled by one of the existing standing committees.

MINUTES OF THE MEETING OF THE FACULTY SENATE, FEB. 8, 1972 (Continued)

A question on the length of Senate meetings was discussed. A suggestion was made to continue meetings which run past 6:00 P.M. the following week. An expression of opinion was called for. Rules of order will be sent to Senators for their information before the question will be discussed further.

As a result of a recent incident indicating inadequacies in Littlejohn Coliseum for concert guests, the Senate has been asked to consider the following resolution:

"WHEREAS present facilities on campus for the presentation of public performances other than athletic events or very small concerts or single speakers are at present grossly inadequate; and WHEREAS the Board of Trustees, in its March, 1966, meeting recognized Clemson's urgent need for an auditorium which would adequately replace and much improve on Tillman Hall Auditorium; and WHEREAS the hoped for multi-purpose usage of Littlejohn Coliseum is proving disappointing and even extremely difficult for all involved;

BE IT RESOLVED that the Faculty Senate most strongly supports the Board of Trustees in its desire for an auditorium facility and urges the Administration to consider placing such an auditorium once more high on its list of priorities for campus building."

There was a motion and second to accept the resolution; the motion passed with a unanimous voice vote.

President Sawyer stated that a summary of the disposition of the actions of the Senate for the year will be mailed to Senators for their information.

Concern over incidents at a recent basketball game was expressed by some Senators. Professor J. C. Mullins moved the following:

"that the Faculty Senate directs its representative on the Athletic Council to discuss at the next Athletic Council meeting the means to prevent harassment of opposing coaches and players at basketball games."

The motion was seconded and passed with a voice vote.

The meeting was adjourned at 5:45 P.M.

Absent from the meeting were: J. A. Hash, B. M. Cool, E. A. Freeman, M. D. Sherrill.

REPORT OF FACULTY SENATE AD HOC COMMITTEE B ON BOOK ORDERING

At the March 21 meeting of the Faculty Senate, Ad Hoc Committee B on Book Ordering procedures presented its final report and recommendations. These were accepted by the Faculty Senate, which voted to press for immediate implementation of all suggestions for action.

The report, in its entirety, reads as follows:

General Comment:

In the opinion of this committee all other aspects of the Bookstore operation are secondary to obtaining textbooks on time and in sufficient numbers. Too many textbooks arrive late at Clemson. It is imperative that this situation be corrected because it is disrupting the educational process.

From the point of view of a student who is without texts it makes little difference who is at fault. The fault may lie with his teacher, the department, the Bookstore or the publisher, but ultimately the University is at fault if it does not provide texts for the courses it offers.

The problem is a very large one but in principle the solution is simple and obvious: Provide the publishers with complete accurate orders in sufficient time for them to deliver the books prior to the beginning of the semester, and follow these orders with inquiries and complaints if there are delays. This obvious solution will, however, require meticulous attention to detail on the part of professors, departments and the Bookstore.

This report recommends that the departments submit their book orders to their dean's office. The Dean's office then forwards them to the Bookstore. The reason for this change is that it will encourage the departments to submit accurate book orders on time. Once this is accomplished the responsibility for placing the books on the shelves prior to the beginning of the semester rests with the Manager of the Bookstore.

Recommendations:

1. Each department should submit its book order to the office of the dean of the school or college. The Dean's office should then forward these orders to the Bookstore.
2. Each department should appoint a person to provide liaison between the Bookstore and the department. This person should be responsible for providing a detailed book order by the prescribed date and for providing any additional information required by the Bookstore. The name and telephone number of this person should be reported to the Bookstore each semester on the book order form.

REPORT OF FACULTY SENATE AD HOC COMMITTEE B ON BOOK ORDERING (Continued)

3. For each textbook the departmental order should indicate whether or not the book will be used again in a subsequent semester. Further, the departmental liaison person should notify the Bookstore at any time if he learns that a textbook will not be used again. This will allow the Bookstore to return unused books to the publisher for rebate within the allowed period.
4. The Manager of the Bookstore should immediately contact the departmental liaison person if book orders are late in arriving, incomplete or ambiguous.
5. The Manager of the Bookstore should place his orders to the publishers by a date which would under normal circumstances result in delivery well before the first day of classes. This would allow a period during which the Bookstore Manager can follow up his orders with telephone calls and letters as required to obtain delivery before the first day of classes if the books are available.
6. The Manager of the Bookstore should inform the departments through their liaison person of any anticipated late arrivals.
7. All books should be on the proper shelves prior to the first day of classes.
8. The following rigid deadlines should be adhered to:

<u>FALL SEMESTER</u>	<u>SPRING SEMESTER</u>	
May 28	October 15	Departmental orders received by the dean's office
June 1	October 19	Orders received by Bookstore
July 1	November 19	All orders submitted to publishers
August 1	December 19	Shipping notices received from all publishers or follow up calls made
August 2	December 20	Bookstore informs departments of probable late arrivals
August 10	December 28	Books on shelves in Bookstore

9. During the summer of 1972 a member of the Faculty Senate appointed by the President of the Faculty Senate will determine whether these deadlines are being met. This appointee will make a report to the President of the Faculty Senate, who will then determine whether further action is required.

REPORT OF FACULTY SENATE AD HOC COMMITTEE B ON BOOK ORDERING (Continued)

10. During the rush period beginning on the first day of classes of both the fall and spring semesters the Bookstore will remain open during the evening.

Respectfully submitted: Jack Davis, Student, Ruth L. Hays, Donald R. LaTorre, Joseph C. Mullins, Ernest B. Rogers, William F. Steirer, Jr., Max D. Sherrill, Chairman

MINUTES OF MEETING OF THE UNIVERSITY AUDIO-VISUAL COMMITTEE, FEB. 15

The fourth meeting of the University Audio-Visual Committee was held in the lounge of the College of Liberal Arts located in Strode Office Tower. The following members of the committee were present: J. F. Allen, W. F. Beckwith, Thomas Douglass, Harry Durham, Mrs. Opal Hipps, J. C. Hubbard, Jr., M. W. Jutras, Mrs. Sarah Walker, Sam Wang, and Mrs. Betty Watkins.

The minutes from the previous meeting for January 5th had been distributed earlier and were approved.

Chairman Jutras reported on conversation with the Chairman of Self-Study Committee, Dr. Cecil Godley, who strongly supported the study of audio-visual facilities and services on campus.

Durham reported on the formation of a group interested in exploring new instructional methods. He said he was surveying a number of people to determine their interest in weekly or monthly luncheon meetings to promote an interchange of ideas regarding new instructional approaches.

Chairman Jutras called for reports from the three sub-committees appointed earlier. Mrs. Watkins, Chairman of the sub-committee on Centralized Audio-Visual Services, submitted a report offering three alternatives to University Audio-Visual Services. Generally, the alternatives were; (1) to continue operating as presently structured with each department purchasing, owning, repairing, and storing its own audio-visual equipment, or (2) to move to a totally centralized audio-visual service where all equipment would be placed in a central pool, or (3) to establish a centralized audio-visual equipment loan facility which would supplement equipment which departments already own and offer repair on their equipment as well as on the new equipment.

After considerable discussion, Chairman Jutras asked Mrs. Watkins' sub-committee to prepare a recommendation generally following the lines of the third alternative.

MINUTES OF MEETING OF UNIVERSITY AUDIO-VISUAL COMMITTEE, FEB. 15 (Continued)

Sam Wang, Chairman of the Sub-committee on Academic Communications Courses, reported that his committee had mailed a questionnaire to all faculty members inquiring about their interest in and evaluation of the need for such courses. The questionnaires were returning, Wang stated, however as yet his committee had no opportunity to summarize the returns.

Chairman Jutras asked to defer the report from the sub-committee reviewing Communications Center Services until the March meeting.

The next meeting will be held on Tuesday, March 21st at 3:30 p.m. in the lounge on the first floor of Strode Tower.

The meeting was adjourned at 4:45 p.m.

AGRICULTURAL ECONOMICS AND RURAL SOCIOLOGY

J. C. Hite (Assoc Prof) served as a panel discussant on the economic realities of solid waste management at the Engineering Foundation's Asilomar Conference on "Packaging Materials and Solid Waste Management," at Pacific Grove, Calif., Mar. 1-5.

J. C. Hite and E. A. Laurent (Ga Tech) are co-authors of an article entitled "Economic-Ecologic Linkages and Regional Growth: A Case Study," in Land Economics, Feb. 1972.

Two papers were presented by members of the Agricultural Economic staff at the annual meeting of the Economics Section of the S. C. Academy of Science at USC on Mar. 25. They were: "The Social Cost of the South Carolina Base Plan," by W. A. Thomas (Grad Res Asst) and R. K. DeHaven (Asst Prof), and "The Relationship Between Air Pollution and Residential Property Values in Charleston," by W. J. Steele (Grad Res Asst) and J. C. Hite.

CHEMISTRY

The National Science Foundation has granted \$11,170 for support of the Student Originated Studies, entitled "A Study of Water Pollution Along the Chattooga and Tugaloo Rivers." This project is under the direction of Eric H. Snider, student project director and assisted by J. C. Fanning (Prof), faculty advisor.

Joe L. von Rosenberg (Assoc Prof) presented a seminar to the Chemistry Dept. of Eastern Kentucky University, Mar. 9, the topic was "Some Aspects of Sigmatropic Rearrangements."

CHEMISTRY (Continued)

The following papers were presented at the 45th Annual Meeting of the S. C. Academy of Science in Columbia, Mar. 24-25:

A. R. Pinder (Prof), S. J. Price (Grad Stu), and J. M. Weston (Undergrad Stu): "Synthetic Studies Directed Towards the Acorones."

John Jacobus (Asst Prof) and Donna E. Hindman (Grad Stu): "The Conformation of 1-Substituted Nicotinamides."

H. G. Spencer (Prof), R. E. Block (former Grad Stu) and C. V. Hinton (Grad Stu): "Substituent Effects on PMR Spectra of Addition Copolymers."

J. C. Fanning (Prof) was elected to a three-year term as Councilor for the S. C. Academy of Science.

CIVIL ENGINEERING

Nuri Akkas (Asst Prof) published the following papers in Journal of Applied Mechanics, March 1972: "On the Buckling and Initial Postbuckling Behavior of Shallow Spherical and Conical Sandwich Shells," p. 163. "Asymmetric Buckling Behavior of Spherical Caps Under Uniform Step Pressures," p. 293.

Myron Spector (Asst Prof) presented a paper entitled "Conversion of Amorphous Calcium Phosphate to Hydroxyapatite" to the 50th General Meeting of the International Association for Dental Research held in Las Vegas, Nev., Mar. 23-26. Co-authors were Drs. M. Sax and J. Pletcher of V.A. Hospital in Pittsburgh, Pa. and Dr. E. M. Krokosky, Carnegie-Mellon University, Pittsburgh, Pa.

CHEMICAL ENGINEERING

A successful seminar on "Introduction to Classical and Modern Control Concepts with Application" was held Mar. 2. Twenty-nine participants heard lectures by Professors D. F. Bruley (Prof), Moderator, J. N. Beard (Asst Prof), and S. S. Melsheimer (Asst Prof).

D. F. Bruley (Prof) presented a seminar at the University of Colorado Medical School "Quantitative Studies in Medical Research" Denver, Colo., Feb. 17.

The Department of Chemical Engineering has received an unrestricted grant of \$1000 for the academic year 1972-73 from the Monsanto Company.

COLLEGE OF ENGINEERING

A National Science Foundation grant of \$41,888 has been awarded to the College of Engineering. The project is under the direction of Lyle C. Wilcox (Assoc Dean). Only two projects of this type involving computers in secondary education were awarded in the southeastern portion of the country; the second going to the University of Kentucky. The grant will support a cooperative college school systems study in interactive computing. The project involves a cooperative study between computer professionals in engineering, education department faculty, high school administrators, and teachers in the sciences and mathematics.

James L. Edwards (Asst to the Dean) addressed the Spartanburg Chapter of the South Carolina Society of Professional Engineers in Spartanburg on Mar. 28. The topic of his address was "Engineering Education - As It Is and As It Trends To Be."

ELECTRICAL AND COMPUTER ENGINEERING

An unrestricted gift has been received in the amount of \$1,000 from Union Carbide Corporation. The money will be used in support of special educational project studies in the department.

L. C. Wilcox (Prof and Hd) and M. L. Wolla (Assoc Prof) were invited guests at the National Science Foundation Project Directors Conference held in Atlanta on Jan. 27-29. The purpose of the meeting was to bring National Science Foundation Program Directors and staff together with University personnel to discuss possible methods of implementing new programs consistent with the changing priorities of the foundation.

A grant of \$36,408 has been received from Greenwood Mills to support fundamental studies relating to computer applications and systems analysis relating to textile manufacturing.

ENGLISH

Robert Hill (Asst Prof) and Sterling Eisiminger (Instr) participated in the poetry workshops of Erskine College on successive Saturdays from Feb. 12 - Mar. 18. Mr. Hill was named poet of the week at the Mar. 11th workshop.

Charles L. Montgomery (Instr in Speech) directed a program for high school debaters and coaches at Virginia Polytechnic Institute Mar. 27. Debate teams from Clemson, Princeton, and Oxford Universities participated.

Corinne Sawyer (Assoc Prof) delivered the Honors and Awards Day address at the Sumter Center.

ENTOMOLOGY AND ECONOMIC ZOOLOGY

Jay D. Hair (Grad Res and Teach Asst) and Raymond Noblet (Asst Prof) visited the University of Georgia in Athens on Mar. 1 to obtain a colony of mosquitoes for future vector studies with Leucocytozoon disease. Mr. Hair presented a seminar to the Parasitology faculty.

Richard F. Nash, Jr. (Asst Prof) attended the meetings and presented a paper on "Summary of Insect Control Experiments in South Carolina," to the 65th Southeastern Pecan Growers' Association Convention in Atlanta, Ga., Mar. 13. This paper will be published in the Proceedings of the Association.

T. R. Adkins, Jr. (Prof) attended the Committee Meeting of the ESA Committee on Professional Training, Standards and Status in Kansas City, Mo., Mar. 29-31. Dr. Adkins is Chairman of this Committee.

R. F. Nash, Jr. gave a talk to the South Carolina Camellia Society on "Insect Pests of Camellias and Their Control," at the Clemson House on Mar. 25.

ENVIRONMENTAL SYSTEMS ENGINEERING

B. C. Dysart III (Assoc Prof) recently presented two invited seminars in Mexico City. The first was entitled "River Basin Water Quality Planning--Some Perspectives on Economics and Equity" and was presented on Mar. 7. This seminar was co-sponsored by the Mexican National Council for Science and Technology, the Water Resources Ministry, and the Mexican Society of Sanitary Engineers. The second seminar was entitled "Dynamic Programming and Sensitivity Analysis in Water Quality Management" and was presented at the University of Mexico on Mar. 8.

B. C. Dysart III presented a seminar entitled "Mathematical Modeling for Environmental Pollution Control" for the staff of the Environmental Protection Agency's Southeast Water Laboratory, Athens, Ga. on Mar. 29.

The ESE Department co-sponsored a workshop with Greenville TEC on innovative curricula development for wastewater treatment plant operator training. The workshop, held Mar. 29-30 at Greenville TEC was attended by about 40 persons from the United States and Canada.

FORESTRY

Marlin H. Bruner (Assoc Prof Emeritus of Forestry and Forest Manager Emeritus, The Clemson Forest) was named "Forest Conservationist" of the year by the South Carolina Wildlife Federation. The award was presented at the Federation's annual banquet in Columbia.

The Clemson University Student Chapter of the Society of American Foresters has just been granted its charter by the Society. The objectives of the Chapter are to advance the science, technology, education, practice, and public acceptance of professional forestry in America, especially in South Carolina, and to use the knowledge and skill of the profession to benefit society.

GEOLOGY

Paul K. Birkhead (Assoc Prof) and Villard S. Griffin (Assoc Prof) attended the Earth Resources Satellite Data User's Conference for S. C., held in Columbia Jan. 25. The conference was co-sponsored by the Division of Geology, S. C. State Development Board and the Sumwalt College of Engineering, University of South Carolina.

INDUSTRIAL MANAGEMENT

James A. Turner, Jr. (Asst Prof) has been elected a Director of the National Association of Accountants, Western Carolina Chapter.

The Forty-Fifth Annual Meeting of the South Carolina Academy of Science was held in Columbia, Mar. 24-25. The following papers were presented: "Economic Sense and Nonsense About SST: An Evaluation of the Arguments" by Clinton H. Whitehurst, Jr. (Prof and Hd). "Some Difficulties in Gathering Meaningful Data to Conduct Research into Community Health Problems" by Cyril O. Shuler (Assoc Prof). "A Computer Based Modeling System for Business Planning" by Robert F. Zant (Asst Prof). Chester R. Smith (Assoc Prof) presided over the session.

INTERDISCIPLINARY STUDIES

Michael G. Waldon (Grad Stu) presented a paper entitled "A Productivity Model for a Reservoir" at the thirty-fifth annual meeting of the American Society of Limnology and Oceanography, Inc. at Florida State University, Tallahassee, Fla. on Mar. 19-22. Co-authors were A. R. Abernathy (Assoc Prof - ESE) and H. R. Bungay III (Prof).

MATHEMATICAL SCIENCES

Anil K. Bose (Assoc Prof), Andrew F. Sobczyk (Martin Prof), and John W. Kenelly (Prof and Hd) attended the Southeastern Sectional Meeting of the Mathematical Association of America. Professor Sobczyk chaired the Analysis Section; Professor Kenelly served as Chairman of the Nominating Committee, and Professor Bose presented a paper "On Linear Differential Equations with Constant Co-efficients."

MECHANICAL ENGINEERING

C. A. Brandon (Assoc Prof) presented a paper entitled, "Fluid-Particle Interaction in Two-Phase Pipe Flow" at the Southeastern Seminar on Thermal Sciences at Vanderbilt on Mar. 23-24. The paper co-authored by M. H. Tennant (Grad Stu) will appear in the published proceedings of the meeting.

C. A. Brandon presented a paper entitled, "Complete Reuse of Textile Dyeing Wastes Processed with Dynamic Membrane Hyperfiltration" at the joint ASME/EPA/AIChE Reuse and Treatment of Waste Water General Industry and Food Processing Symposium in New Orleans Mar. 28-30. The paper was co-authored with J. J. Porter (Assoc Prof and Acting Hd of Textile Science Dept) and Drs. J. S. Johnson, Jr. and R. E. Minturn of the Oak Ridge National Laboratory.

MICROBIOLOGY

On Mar. 3, the department of Microbiology hosted the spring meeting of the South Carolina Branch of the American Society for Microbiology, and J. H. Bond (Assoc Prof) presided.

The following presentations were made by departmental staff:

"Immune Response of Rabbits Exposed to a Simulated Spacecraft Environment," by R. N. Moore (Grad Res Asst), R. N. Ferebee (Grad Res Asst) and R. K. Guthrie (Prof and Assoc Dean).

"Comprehensive Analysis of the Immune Response in Rabbits to DNP-Conjugates of Homologous and Autologous Serum Proteins," by Brother Elmer Brummer (Grad Res Asst) and R. K. Guthrie.

"Growth of Methanobacterium Strain M.O.H. in Chemostat Culture," by F. M. DeWork (Belle Baruch Fellow in Natural Resources Biology) and M. J. B. Paynter (Assoc Prof and Hd). For this paper, F. M. DeWork received the annual "Graduate Student Award" made by the S. C. Branch of A.S.M.

MUSIC

Edith Card (Instr) had an article entitled, "A Sequential Method of Teaching Part Singing," in the April, 1972 issue of the Music Teacher's Workshop, a new magazine for Music educators.

RECREATION AND PARK ADMINISTRATION

Jack Stevenson (Assoc Prof) was recently installed as National Chairman of The Publications Committee of the American Camping Association for 72-74. In this office he will serve on the ACA National Board of Directors. His installation was part of his participation in ACA's bi-annual National Convention held in New York City on March 15-18.

SOCIAL SCIENCES

J. V. Reel (Assoc Prof) presented "Thomas of Doncaster and English Local Government," at the Missouri Valley History Conference, Omaha, Neb., Mar. 10.

James Sargent (Instr) presented "Franklin Roosevelt, Raymond Moley, and the World Economic Conference, 1933," at the Missouri Valley History Conference, Omaha, Neb., Mar. 10.

R. S. Lambert (Prof and Hd) presented an historian's view on "What is Expected of Archives," a panel held at the annual meeting of the South Atlantic Archives and Records Conference, Mar. 24 at Charleston.

TEXTILE DEPARTMENT

Donald W. Lyons (Assoc Prof) and John D. Hatcher (Asst Prof) received a grant from the U.S. Office of Education under the Title I Higher Education Act to conduct Occupational Safety and Health Workshops for state and local governmental units. The total amount of the program is \$34,662.

Donald W. Lyons was elected Publicity Chairman and Newsletter Editor for the Textile Engineering Division of the American Society of Mechanical Engineers.

STATUS OF APPLICATIONS TO GRADUATE SCHOOL AS OF APRIL 5, 1972
FOR ADMISSION IN AUGUST 1972

MAJOR FIELD	NO. APPLTNS.	ACCEPTED	AV. GRE	AV. GPR	ACTIVE
Agricultural Economics	13	3	1000	3.16	9
Agricultural Engineering	4	1	1400	3.09	3
Agronomy	6				6
Animal Physiology	1				
Animal Science	3	1		2.63	1
Entomology	11	7	1024	2.77	3
Horticulture	5	4	1170	3.57	1
Nutrition	4				4
Plant Pathology	3				3
Plant Physiology	2				2
Poultry Science	1				1
Wildlife Biology	6	1	950	2.47	5
Architecture	23				23
City and Regional Planning	5				4
Visual Studies	4				4
Education Non Degree	2	1			1
Ed Adm Supr	5	3		2.78	
Elementary Education	2	2	980	2.99	
Industrial Education	5	2		3.15	2
Personnel Services	12	7		3.04	4
Reading	2				1
Secondary Education	19	9	1130	3.27	6
Bioengineering	19	3	1120	2.98	10
Ceramic Engineering	2	2	1295	3.82	
Chemical Engineering	50	20	1181	3.15	19
Civil Engineering	16	6	1074	3.14	8
Electrical Engineering	26	10	1140	3.21	14
Engineering Mechanics	3	1	1120	3.13	2
Environmental Systems Engineering	36	14	1150	2.98	19
Materials Engineering	5				3
Mechanical Engineering	11	2		2.68	6
Systems Engineering	4	1	1060	3.68	3
Water Resources Engineering	9	4	1066	2.70	4
Economics	6				5
Engineering Management	13	2	1115	2.53	6
Management	11	3	1095	2.94	6
Textile and Polymer Science	7	1			4
Textile Chemistry	9	2	1120	3.05	5
Textile Science	12	1	960	3.18	8
English	11	6	987	3.58	5
History	7	3	1166	3.03	3
Biochemistry	2				2
Botany	7	1	1160		5
Chemical Physics	1				
Chemistry	18	9	1091	2.98	8
Mathematics	116	53	1146	3.43	51
Microbiology	9	3	1120	3.09	6
Physics	18	6	1168	3.25	11
Zoology	27				25
Forestry and Recreation (undeclared)	1	1			
Forestry	3	2	1150	2.67	1
Recreation and Park Administration	16	10	1130	2.92	3
TOTALS	613	207	1132	3.17	325

CALENDAR OF CAMPUS EVENTS

April 15	Sat.		Dionysia 72 - Student competition
		9:00 a.m.	French - Daniel Auditorium
			Russian - McAdams Auditorium
			Spanish - Food Industries Auditorium
		1:15 p.m.	French - Daniel Auditorium
			German - McAdams Auditorium
			Spanish - Food Industries Auditorium
		6:00 p.m.	Awards and Prizes, Daniel Auditorium.
April 15	Sat.		Baseball - North Carolina State at Clemson.
April 15	Sat.		Outdoor Track - at Georgia.
April 15	Sat.		Graduate School Foreign Language Test.
April 16	Sun.		Baseball - University of North Carolina at Clemson.
April 17	Mon.		Microbiology Seminar - Dr. C.D. Graber, Medical University of South Carolina, -- "Immunologic Aspects of Cancer" -- 302 Rhodes Engineering Research.
April 18	Tues.		Clemson Area Continuing Education Classes.
April 18	Tues.		Baseball - at Georgia.
April 20	Thurs.	4:00 p.m.	ESE Spring 1972 Seminar -- Cary Counts, "Water Plant Operations" -- Charles Jeter, "Regulation of Thermal Discharges by Generating Stations" -- 302 Rhodes Engineering Research Center.
April 21	Fri.		Baseball - University of South Carolina at Sumter.
April 21- April 22	Fri.- Sat.		Outdoor Track - Pennsylvania Relays.
April 22	Sat.		Baseball - Georgia Tech at Clemson.
April 22	Sat.		Graduate Record Exam.
April 23	Sun.	3:00 p.m.	The Clemson Chorale Society and University Chorus will present Franz J. Haydn's "Creation" in Tillman Hall Auditorium.
April 24	Mon.		Examinations begin.
April 25	Tues.		Clemson Area Continuing Education Classes.
April 28	Fri.		Dental Aptitude Test.
April 30	Sun.		Daylight Savings Time begins.
May 2	Tues.		Baseball - Georgia at Clemson.

PROCEDURES FOR SUBMITTING NEWSLETTER MATERIAL

All Calendar items of campus events (speakers, films, meetings, seminars, sporting events, etc.) should be submitted by written memorandum directly to the Office of Public Relations, Trustee House. Information and news items from the Office of the President, Vice President for Business and Finance, Vice President for Executive Affairs, Vice President for Student Affairs and the Vice President for Development should be submitted by written memorandum to the Office of Public Relations, Trustee House. Information and news items from all areas under the Vice President for Academic Affairs should be submitted by written memorandum to Dr. Claud B. Green, Room 28, Tillman Hall.

The following deadlines prevail: Items to appear in the Newsletter published the 1st of each month must be submitted by the 20th of the previous month; items to appear in the Newsletter published the 15th of each month must be submitted by the 5th of each month.

CLEMSON

MAY 9 1972

CLEMSON UNIVERSITY LIBRARY
SOUTH CAROLINA ROOM

NEWSLETTER

INFORMATION FOR THE STAFF OF CLEMSON UNIVERSITY

Vol. 11 No. 18

May 1, 1972

PICKENS' PAPERS PRESENTED TO LIBRARY

A valuable historical collection of letters, papers, and other documents dealing with the life of Gen. Andrew Pickens has been presented to R.M. Cooper Library. The collection is a gift from Mrs. Alice Noble Waring of Hughes, Ark., a great-great-great granddaughter of Pickens. She assembled the 326 pages of photostatic copies while writing a book about the famous South Carolina general. (Continued on page 2.)



UNIVERSITY-WIDE AWARD WINNERS -- Recipients of top university-wide awards during Honors and Awards Day activities April 5 are shown with President Robert C. Edwards. They are (L-R), Joe F. Anderson Jr., Edgefield, Algernon Sydney Sullivan Medallion; Annie B. Brown, Walhalla, American Association of University Women Award; Jerome Wells, Orangeburg, Phi Eta Sigma Award; Mrs. Gertrude R. Bailey, Clemson, Sullivan Medallion; Thomas D. Skidmore, Roselle, N.J., Trustees Medal; and Nelwyn L. Stone, Anderson, Phi Kappa Phi Award.

PICKENS' PAPERS PRESENTED TO LIBRARY Continued

Among the papers are letters to and from Gen. Pickens in the late 18th and early 19th centuries. The collection is concentrated particularly in Pickens' military correspondence with the southern commander, Gen. Nathanael Greene, in 1781-1782, during the campaigns in the Carolinas. There are also scattered letters on family and business matters in the post-war period, a plat of Pickens' landholdings, and typed copies of the wills of Pickens and his father.

Mrs. Waring is the author of "The Fighting Elder: Andrew Pickens, 1739-1817," published in 1962.

FRESHMAN AWARDED MARGARET B. POOLE SCHOLARSHIP

The first "Delta Delta Delta Margaret B. Poole Scholarship" at Clemson University has been awarded to Miss Mary Rose Paradis, freshman zoology major from Columbia. The \$300 award, which is named in honor of Mrs. Margaret B. Poole, widow of former president of the University Dr. Robert F. Poole, is to be given annually by Clemson's Beta Theta chapter of Delta Delta Delta sorority.

A drop-in was held in Barnett Hall for Miss Paradis and Mrs. Poole, who is a close friend and advisor to the chapter. It was attended by various academic and student dignitaries, including President Robert C. Edwards and student body president Sam F. Crews.

Miss Paradis is now eligible for competition for a Delta Delta Delta national scholarship of \$1,000.

REDFERN HEALTH CENTER

Among the Redfern Health Center staff members attending the 15th annual meeting of the American College Health Association in Atlanta, Ga., April 4-7 were Dr. Judson E. Hair (Dir), Dr. Donald K. Freeman (Student Mental Health Program Dir and Lecturer - Consultant in Nursing and Psychology), and Mrs. Ruth D. Durham (Dir, Nurses). Theme of the conference was "Resources for Health." For several years the problems of health care and health service delivery have been matters of national concern. Most observers expect this concern will culminate in a basic reorganization of health service delivery and financing in the U.S.

With a focal point on College and University Health Services, Dr. Hair presented a speech on "The Relationship of the Health Maintenance Organizations to the College and University Health Service in the Rural Setting." He pointed out some of the shortcomings of the present health maintenance organizations and offered a format for improvement.

Dr. Freeman presented a discussion of "The Incidence and Variety of Sleep Disturbances Among College Students" to a Mental Health Section session at the meeting. Co-authored by Spurgeon N. Cole (Assoc Prof Psychology and Consultant to the Mental Health Program), the presentation incorporated the latest findings in sleep and dream research, clinical experience on this campus, and a sleep habit and attitude survey of 190 Clemson students.

Mrs. Durham was co-chairman of the program committee for the Nursing Section at the meeting, and also served as chairman of local arrangements for the Nursing Section luncheon.

BASIC SAILING COURSE OFFERED

The YMCA will offer a basic sailing course that will be taught at the YMCA Beach May 8-19. The 18-hour course will be limited to the first 12 people who sign up at the YMCA desk (8:30 a.m. to 5 p.m. daily) at the Holtzendorff YMCA Center. Requirements are that participants must be able to swim 10 minutes fully clothed and be 16 years of age or older. Prams, Penguins and Sloops will be used. It is not necessary to have a boat in order to participate. Cost of the course is \$6.00 per person. Upon completion of the course, University faculty and staff members will be permitted to use the Sailing Club's boats during the summer.

MINUTES OF THE ADMINISTRATION-FACULTY-STUDENT COUNCIL MEETING, MARCH 3, 1972

Chairman Joseph Hutchinson called the regular meeting of AFSC to order at 12:20 p.m. in the Student Government Conference Room. Those present were: Chairman Joseph Hutchinson, Corinne Sawyer, John Marshall, Vernon Hodges, Fred Keller, M.N. Lomax and Secretary George Moore. Absent were: General A.W. Rigsby, Angie Prince and E.H. McCarter.

The principal topic of discussion was the class attendance regulations. The Faculty Senate is soon to consider a bill presented them by the Student Senate suggesting some liberalization of the regulations.

ACTION: Mr. Marshall's motion that the minutes of the meeting of February 18, be approved as distributed was seconded and passed.

There being no further business the Council adjourned at 1:00 p.m. The next meeting of AFSC will be March 24 at 4:00 p.m.

POLICY CHANGE BY STATE EMPLOYEES' CREDIT UNION

Prior to January 1972, participation in the State Employees' Cooperative Credit Union was limited to members of the S.C. State Employees' Association, but Association membership is no longer required for enrollment in the Credit Union.

Loans for the purchase of new automobiles are currently being made by the Credit Union to established Clemson employees at an interest rate of $\frac{3}{4}$ of 1 per cent per month of the unpaid balance. Loans may cover as much as 75 per cent of the delivered list price of the car and may be extended over 36 months. Closing costs are nominal, and the borrower may purchase the required insurance from any company licensed by the S.C. Insurance Commission.

Earnings of the Credit Union are never guaranteed, but six per cent (6%) interest was paid in January on deposits for the year 1971. Deposits made before a member attains age 55 also provide group life insurance without cost equal to the total on deposit, up to \$2,000.

Any Clemson University employee interested in Credit Union membership, as a depositor or borrower, should contact its office at 2414 Bull Street, Columbia, S.C. (Telephone 256-2097).

MINUTES OF THE MEETING OF THE FACULTY SENATE, MARCH 21, 1972

The meeting was called to order by President Sawyer at 4:17 p.m. The minutes of the February meeting were approved as circulated by mail.

President Sawyer announced that, at present, no action has been taken on the Senate request for establishment of a faculty committee to support political action on a new retirement plan for State employees. She further announced that the report of the Southern Association's Visitation Committee has been sent to Clemson, and that copies of the report will be sent to every dean and department head this week. Faculty members may read the report, but are reminded that until it has been approved by the Southern Association, its comments are considered confidential. The administration will be seeking solutions to some of the problems on which the Visiting Committee recommended action in that report.

The first item of old business was confirmation of the results of a mail-vote on rewording the description of the Computer Advisory Committee which is to go in the faculty manual:

Computer Advisory Committee. This committee consists of the Director of the Computer Center, ex officio; one member from each college, nominated by the dean of the college and appointed by the Dean of the University for a term of three years; and two students, one undergraduate and one graduate, appointed for a term of one year by the Dean of the University after consultation respectively with the Dean of Undergraduate Studies and the Dean of Graduate Studies and University Research.

In addition, one representative from each of the following areas is invited to serve on this committee: Business and Finance, Development, and Student Affairs. The committee elects its chairman annually.

Standing subcommittees may be created by the chairman in consultation with the Dean of Graduate Studies and University Research and may include individuals who are not members of the Computer Advisory Committee. Two of these standing committees shall be: (1) a technical advisory committee to assist in long range planning concerning computer hardware and staff requirements in the Computer Center; and (2) an operations committee to make recommendations regarding operational procedures and the acquisition of software packages.

The committee advises the Dean of Graduate Studies and University Research on needs of the Computer Center, Computer Center policies, and on such other matters as may be referred to it by the faculty, administration, or students.

MINUTES OF THE MEETING OF THE FACULTY SENATE, MARCH 21, 1972 (Continued)

The Senate approved the description by a mail-vote of 26 to 1. Confirmation was indicated by unanimous voice vote.

Two proposed amendments to the faculty manual were unanimously approved as follows: Inclusion of the Dean of Liberal Arts in the membership of the Fine Arts Committee; and substitution of the phrase "the appropriate administrative officer" for "the dean" in citing the authority who can give permission for any staff member at Clemson, faculty or otherwise, to enroll in graduate courses.

The proposed amendments to the Constitution and By-Laws of the Faculty and Faculty Senate, which were introduced at the February 8 meeting, were reintroduced for action. The amendment calling for replacement of the phrase "the teaching and research faculty" with "the teaching, research, and extension faculty" was unanimously approved. The latter amendment will be brought before the entire faculty for consideration in May. The amendment calling for addition of a sixth committee, to be designated the Extension Committee, to the standing committees of the Faculty Senate was rejected by unanimous voice vote.

Professor V. S. Hodges, who has served as Chairman of the Student Relations Committee for its one-year trial period of operation, reported to the Senate the activities of that committee. Professor Hodges stated that the Committee had served a worthwhile purpose in hearing appeals from students. On the basis of the report and recommendations of Professor Hodges, the Senate unanimously approved a motion to continue operation of the Committee for another one-year trial period, and further to allow each member of the Committee to designate an alternate to attend the meetings if it became necessary.

Professor Hodges moved, seconded by Professor W. F. Steirer, adoption of the following suggested wording of the "Forgiveable Grade":

First-time college students who reschedule courses that were passed or failed in their first semester and contiguous summer sessions will have their grade-point ratio re-calculated to reflect only the grade obtained on the first re-attempt in courses which have been repeated. Should a course be discontinued, the department which taught the original course may permit a student to take a similar course for the purpose of raising his grade-point ratio in this fashion.

To qualify for re-calculation as provided in this regulation, a student must repeat the course previously passed or failed no later than the next semester (following his first semester) in which the student is enrolled and the course is taught. It shall be the responsibility of a student, who thus elects to repeat a course, to notify the Office of Admissions and Registration during the semester or summer session in which the course is repeated.

MINUTES OF THE MEETING OF THE FACULTY SENATE, MARCH 21, 1972 (Continued)

A substitute motion to eliminate the "Forgiveable Grade" was presented by Professor J. C. Mullins, seconded, and defeated. The original motion passed unanimously. Professor Mullins then moved, seconded by Professor Hodges, that the regulation be implemented at the earliest possible date. This motion also passed unanimously.

There were no reports from the Policy Committee or Research Committee. Professor F. J. Keller, Chairman of the Admissions and Scholarship Committee, reported on committee activities for the year. The committee has looked into the matters of the four week period allowed for dropping a course, current use of "Withdraw-Pass" and "Withdraw-Fail" designations, maximum recommended credit loads as determined by the Grade-Point Ratio, and current regulations concerning optional final examinations; the committee agrees with present regulations governing these items and therefore recommended no change. The committee has also addressed itself to current policy dealing with changing rules pertaining to admission, instruction, and graduation, as specified on page 22 of the Graduate School Announcements. Since a subcommittee of the Graduate Council is also looking into the matter, the committee recommended delay of further consideration pending a report from that subcommittee. Professor Keller reported that his committee had been asked to make a recommendation concerning a Student Senate resolution requesting more unexcused class absences than currently allowed. While the committee realized that the resolution has merit in that it points out certain inconsistencies in the manner in which unexcused absences are currently handled, they expressed disapproval of the principle of increasing the number of unexcused absences and thus, disapprove of the resolution as it is currently written. However, the matter is to be passed on to the Admissions and Scholarship Committee of the 1972-73 Senate, who are requested to propose an alternate wording.

Professor W. E. Castro, Chairman of the Welfare Committee, reported that Professor C. O. Shuler of the Industrial Management Department was given a vote of confidence by the committee in his effort to obtain justification for a Health Maintenance Organization at Clemson University. Such a program would allow total medical care (with the exception of dental and psychiatric care) for a family of four for the sum of \$600 annually. A major advantage pointed out was that of making available a local emergency out-patient facility. The committee has also addressed itself to the matter of restricting some university tennis courts for faculty use only, but has taken no action. Professor Castro suggested that if the Senate were still interested, the item could be passed on to the Welfare Committee of the 1972-73 Senate.

Professor J. D. Fulton, Chairman of Ad Hoc Committee A on the faculty club facility, answered questions concerning a final report which was mailed to Senators earlier. With that report came the recommendation that Ad Hoc Committee A be retained as part of the Faculty Senate for 1972-73. A motion, and second, to recommend the committee to the 1972-73 Senate carried.

MINUTES OF THE MEETING OF THE FACULTY SENATE, MARCH 21, 1972 (Continued)

Professor M. D. Sherrill presented the final report of Ad Hoc Committee B on the book ordering system of the University Book Store. The report contained ten recommendations which, if implemented, would improve book ordering procedures. In addition to the report, Professor Sherrill informed the Senate that: 1) the space occupied by the book store is to be expanded this year; 2) three additional persons are to be added to the staff operating the book store; 3) a stock clerk is to be employed full time; 4) and renovations in record keeping are to be made. There was a motion and second to accept the recommendations in the report, to request their implementation and to request that the entire report be printed as a separate item in the Clemson Newsletter. The motion passed unanimously.

Professor E. A. Freeman, Chairman of Ad Hoc Committee C on planning and development, answered questions pertaining to an extensive informational report previously distributed to senators by mail. No action was necessary on the report.

Professor W. F. Steirer, Chairman of the interim committee on off-campus faculty, reported that the committee had met and had established its procedures for operation.

Appreciation and commendation was expressed by President Sawyer to the committees and committee chairmen for their good work.

The first item of new business was the presentation, by the Admissions and Scholarship Committee, of a resolution to replace the existing paragraph (labeled (4), on page 120) of the Clemson University Announcements concerning earning course credit by special examination. The feeling expressed was that the present regulation presents certain problems; there is much difficulty in determining a letter grade on the basis of a single examination, and a student is presently allowed to stand a special examination for the same course more than once. The resolution reads as follows:

RESOLVED, That the paragraph labeled (4) on page 120 of the 1971-72 Clemson University Announcements be replaced by the following:

(4) A grade of either pass or fail will be determined by the instructor concerned on the basis of the examination. A grade of pass means that the student will receive credit for having taken and passed the course and that the appropriate number of "hours taken" and "hours earned" will be entered on his transcript. A grade of fail means that the student must take and pass the course in the ordinary fashion in order to receive credit for it. In either case the examination will have no effect on the student's GPR. A student may take a special examination for a given course only once.

A motion to accept the resolution was seconded and passed unanimously.

MINUTES OF THE MEETING OF THE FACULTY SENATE, MARCH 21, 1972 (Continued)

Professor F. J. Keller moved the adoption of the following resolution:

RESOLVED, That graduating seniors who are passing a given course on the last day of classes be given a grade on the basis of work to that time and not be required to stand a final exam. If the student is failing the course, or has an insufficient GPR based on work to that time, or requests the privilege of taking the final exam, then he will not receive his diploma at the graduation exercises. Grades for graduating seniors should be turned in to the Registrar by 10:00 A.M. on the Monday following the last day of classes (Friday) and commencement should be held on the following Friday.

The motion was seconded. Professor W. E. Johnson moved, seconded by Professor R. A. Godbout, to amend the original resolution to call for setting the day for graduation as the Saturday following the last day of classes. The motion was defeated by voice vote. Professor W. E. Castro moved to table the motion. That motion was seconded and defeated by a vote of 13 to 15. Professor J. C. Mullins called for the question and the original motion was defeated.

Professor N. D. Camper presented a proposed resolution from the Research Committee concerning operational policies being established by service organizations on campus without consultation with faculty and staff affected by these policies. Specific examples were cited wherein the efficiency of teaching, research, and extension activities had been adversely affected by such lack of communication. Professor Camper stressed the point that the faculty desires only to be consulted, and not to set policies. Professor Camper moved adoption of the resolution which reads as follows:

BE IT RESOLVED that the Faculty Senate: (a) disagrees strongly with the establishment of operating procedures and policies by the various University service organizations such as Accounting, Purchasing, Physical Plant Division, Central Office Services, Central Stores, Computer Center, and the Personnel Division, without prior consultation with faculty members and departments affected, and without proper communications concerning such policies; (b) recommends that in the future when operating procedures and policies are to be revised or new ones established that the faculty and departments or their representatives be consulted for comments and suggestions and that communications concerning policy changes or establishment be improved.

The motion was seconded and, following, discussion, passed unanimously.

MINUTES OF THE MEETING OF THE FACULTY SENATE, MARCH 21, 1972 (Continued)

Professor F. J. Keller moved the adoption of a resolution concerning transfer credit for students from Technical Education Centers. The spirit in which the resolution was presented was that the same degree of scrutiny, at least, be applied to acceptance of transfer credit from technical schools as is applied to that from other universities. The motion was seconded. Professor D. R. LaTorre then moved the adoption of a substitute wording which reads as follows:

BE IT RESOLVED that the Faculty Senate endorses the principle of allowing transfer students from TEC and similar institutions full credit for university-level work that they have completed.

BE IT FURTHER RESOLVED, however, that the Faculty Senate strongly disapproves blanket approval of large numbers of transfer courses from any institutions to replace courses at Clemson University without some mechanism for evaluation of course equivalency. The Faculty Senate, therefore, urges the University Curriculum Committee to take great care in maintaining Clemson University's academic standards while determining the mechanism by which such transfers from TEC institutions can best be accomplished.

The motion was seconded and passed unanimously.

President Sawyer called attention to an informational sheet containing discount rates at Disneyland and Disney World for organizations with 500 or more personnel. An expression of interest was called for and the Senate requested that President Sawyer fill out the necessary application forms to make the discounts available to Clemson faculty and staff.

President Sawyer expressed her sincere appreciation to the 1971-72 Faculty Senate for their work.

The meeting was adjourned at 6:50 p.m.

Absent from the meeting were: J. H. Bond, J. A. Hash, B. C. Caffrey.

CIVIL ENGINEERING

Rudolf E. Elling (Assoc Prof) with W. Flugge (Dept of Applied Mechanics, Stanford University) published a paper entitled "Singular Solutions for Shallow Shells" in the Int. J. Solids Structures, 1972, Vol. 8, pp. 227-247, Pergamon Press.

COUNSELING

Dr. Virginia S. Hardie (Dir) presented a research paper, "An Open Admission Policy, Personalized Attention and a Pass-Fail System as Revealed in a Comprehensive Study of University Freshmen" at Southeastern Psychological Association meeting in Atlanta, Georgia, April 5-8, 1972.

MINUTES OF MEETING OF THE UNIVERSITY LIBRARY COMMITTEE, MARCH 7, 1972

Present: M. W. Jutras (Chairman), William E. Bachop, R. J. Calhoun, Ralph Knowland, David Rowe (Student Senate), R. E. Schoenike, M. D. Sherrill, J. M. Wannamaker, Patrick R. Watts (Student Representative), H. H. Wilson, J. W. G. Gourlay (Secretary).

Minutes of the meeting of February 1 were approved.

Weeding of Collections - Dr. Jutras reported that he had talked with several library representatives concerning the weeding of collections in the Science, Technology and Agriculture area. The general consensus was that before a book was selected to be placed in storage it should be examined by more than one department. Dr. Jutras indicated that he would prepare a report on the method that could be used for the selection of books to be placed in storage.

Dr. Schoenike reported on the progress that he had made in his study of library security as this related to theft and vandalism. A general discussion followed his presentation. At the April meeting Dr. Schoenike will make a more detailed report on this study.

Time of next meeting: Tuesday, April 4, at 3:30 p.m.

AGRICULTURAL ECONOMICS AND RURAL SOCIOLOGY

J. C. Hite (Assoc Prof) and T. C. Meadows (Mars Hill College) presented a paper entitled "Industry Mix, Environmental Quality and Economic Development" at the annual meeting of the Southern Regional Science Association at Williamsburg, Va., Apr. 13-14. J. M. Stepp (Alumni Prof) and Clayton Grant (Grad Res Asst) served as discussants of other papers at the meeting.

CHEMISTRY

Recent publications:

Philip A. Spanninger (former Grad Stu) and J. L. von Rosenberg (Assoc Prof), "Mechanism of the Rearrangement of Alkyl Phenyl Ethers. Aluminum Chloride Catalyzed Rearrangement of n-Butyl and sec-Butyl Phenyl Ethers," J. Amer. Chem. Soc., 94, 1970 (1972).

Philip A. Spanninger and J. L. von Rosenberg, "Mechanism of the Rearrangement of Alkyl Phenyl Ethers. Aluminum Bromide Catalyzed Rearrangement of sec-Butyl Phenyl Ether," J. Amer. Chem. Soc., 94, 1973 (1972).

CHEMISTRY (Continued)

Fourteen students attended the 4th Annual Southeastern Regional Conference of American Chemical Society Student Affiliates and Student Undergraduate Chemists, at Virginia Polytechnic Institute and State University, Blacksburg, Va., Apr. 6-8. The following papers were presented:

"The Polarographic Study of Carboxylic Acid Derivates of Oyridine in Aqueous and Non-aqueous Media," Lawrence O. Harper (Stu) and Roy Bailey (Assoc Prof).

"The Reaction of Irons (III) Octalthylporphyrin Chloride with Nitrogen Dioxide," Timothy L. Gray (Stu), James C. Fanning (Prof), and N. Datta-Gupta (Prof, Dept of Natural Sciences, S. C. State College).

"The Measurement of Ultraviolet Radiation Using the Photolysis of Uranyl Oxalate," E. Rawson Griffin III (Stu) and C. B. Bishop (Assoc Prof).

"Ultraviolet Photochemical Polymerization of Organic Coatings," E. R. Griffin III and C. B. Bishop.

"Synthetic Approaches to Acorone," Jeffrey M. Weston (Stu) and A. R. Pinder (Prof).

Recent publication: "Prussian Blues from the Thermal Decomposition of $\text{H}_4\text{Fe}(\text{CN})_6$ and $\text{H}_3\text{Fe}(\text{CN})_6$ " by James C. Fanning, Claudene D. Elrod (Grad Stu), Bethany S. Franke and Joseph D. Melnik (former students), J. Inorg. Nucl. Chem., 34, 139 (1972).

COLLEGE OF ENGINEERING

James L. Edwards (Asst to the Dean) participated in the Regional Administrative Conference of the American Society of Mechanical Engineers held at Hampton, Va., Apr. 7-8. Professor Edwards is currently chairman of the regional Technical Division Interest Committee.

L. G. Rich (Dean) who is a member of the Governor's Committee to Study the Establishment of Plants or Facilities for the Recovery of Nuclear Fuel and the Storage of Waste Nuclear Materials attended a meeting of that committee in Columbia on Mar. 30.

L. G. Rich presided at the Advanced Wastewater Treatment Session of the second annual Environmental Engineering and Science Conference in Louisville, Ky. on Apr. 19-21.

COLLEGE OF ENGINEERING - CONTINUING EDUCATION

A seminar on "Minicomputer Applications in Business and Industry," will be presented on Tuesday, May 2, at Clemson House - sponsored by the Dept. of Electrical and Computer Engineering. Appearing on the program will be R. Stinaff (Asst Prof - E&CE); T. L. Drake (Assoc Prof - E&CE); J. Gowdy (Assoc Prof - E&CE); and a representative from Digital Equipment Corporation, Maynard, Mass. Additional information may be obtained from Prof. R. A. Banister, Director, Continuing Education, College of Engineering, 116 Riggs Hall.

COLLEGE OF ARCHITECTURE

Gayland Witherspoon (Hd, Dept of Architectural Studies), Jerry Clement (Asst Prof), Clarence Addison (Instr), George Means (Prof), and James Dalton (Asst to the Dean) attended the Regional Association of Collegiate Schools of Architecture meeting on Apr. 12-14 in Auburn, Ala., and participated in the program. Clemson's presentation included a student film on the College of Architecture and a student presentation of graduate research being conducted on medical health facilities for South Carolina.

ELECTRICAL AND COMPUTER ENGINEERING

R. W. Snelsire (Assoc Prof) presented a paper entitled, "Minimum Sequential Machines for the Simultaneous Recognition of Different Regular Expressions," at the fourth annual southeastern System Symposium in Lexington, Ky., Apr. 3.

T. L. Drake (Assoc Prof) and J. A. Miller (Grad Stu) authored a paper entitled, "DADMS - An Analog Data Acquisition, Display, and Management Software System," which was presented at the Region III Conference of the Institute of Electrical and Electronic Engineers in Knoxville, Tenn., Apr. 10-12.

T. L. Drake and G. E. Singletary (Grad Stu) authored a paper entitled, "A Continuous Signal Pattern Recognition Method Using Data Redundancy Reduction," which was presented at the Region III Conference of the Institute of Electrical and Electronic Engineers in Knoxville, Apr. 10-12.

B. E. Gilliland (Assoc Prof), W. D. Blair (Grad Fellow), and J. M. Murray (Grad Asst) presented a paper entitled, "A Miniature Physiological Force Transducer for Oviduct Motility Studies," at the Region III Conference held in Knoxville, Apr. 10-12.

B. E. Gilliland (Assoc Prof), A. S. Collins (Grad Asst), and J. F. Andrews (Hd, ESE Dept) presented a paper entitled, "Direct Digital Control Algorithms for Waste Treatment Plants," at the Region III Conference held in Knoxville, Apr. 10-12.

ELECTRICAL AND COMPUTER ENGINEERING (Continued)

J. M. Murray (Grad Stu), J. W. Jones (Grad Stu), and J. W. Lathrop (Prof), presented a paper entitled, "Micropower LSI Data Monitoring Systems," at the Region III Conference held in Knoxville, Apr. 10-12.

ENGLISH

C. L. Montgomery (Instr in Speech) directed a workshop, "High School Debating in South Carolina," at the April meeting, on the Clemson campus, of the South Carolina Speech Association. At the same meeting he was elected vice president of the association.

C. L. Montgomery presented a paper, "An Examination of Artistic Ethos in Selected Intercollegiate Debates" at the San Antonio meeting of the Southern Speech Communication Association.

Arthur J. Fear (Assoc Prof of Speech) was elected, in San Antonio, to the governing body of the Southern Speech Communication Association.

Robert W. Hill (Asst Prof) led a poetry workshop at the South Carolina Arts Commission Festival at Presbyterian College on Apr. 14. Professor Hill was also the poetry judge for the Citadel's Gilbert Paul Kearns Memorial Prize, 1972.

M. A. Owings (Prof and Hd) published a review of Essays in Honor of Richebourg Gaillard McWilliams in the current issue of South Atlantic Bulletin.

ENVIRONMENTAL SYSTEMS ENGINEERING

J. F. Andrews (Prof and Hd) presented a focal topics paper entitled "Dynamics and Control of a Multi-Stage Biological Process" at the Fourth International Fermentation Symposium, Mar. 20, Kyoto, Japan.

T. M. Keinath (Asst Prof) presented an invited seminar entitled, "A Systems Approach for Textile Wastewater Renovation" at the University of Illinois, Apr. 12.

HORTICULTURE

G. E. Stembridge (Assoc Prof) attended the Annual Conference of the Dwarf Fruit Tree Association in Grand Rapids, Mich. on March 9-11, and served as chairman of the meeting on March 11. Conferees were present from 26 states, Canada, and three European nations.

GEOLOGY

The following papers were presented at the Southeastern Section of the Geological Society of America meeting in Tuscaloosa, Ala., Mar. 27-29:

R. D. Hatcher, Jr., (Assoc Prof), "Basement versus cover rocks in the Blue Ridge of northeast Georgia, northwestern South Carolina and adjacent North Carolina."

R. D. Hatcher, Jr., Van Price (Asst Prof at Furman) and David S. Snipes (Assoc Prof), "Analysis of Chemical and Paleotemperature Data from selected carbonate rocks of the southern Appalachians."

INTERDISCIPLINARY STUDIES

S. F. Hulbert (Assoc Dean) participated in the National Academy of Sciences Workshop on Fundamental Studies for Internal Structural Prostheses at Charlottesville, Va. on Apr. 13-14.

S. F. Hulbert, B. W. Sauer (Asst Prof) and P. J. Aragon (Prof, Universidad de los Andes, Venezuela) presented a paper entitled "In vivo Corrosion Studies of Prosthetic Metals" at the 1972 NACE Corrosion Research Conference, St. Louis, Mo. on Mar. 21.

S. F. Hulbert presented a paper entitled "Attachment of Prostheses to the Musculo-Skeletal System by Tissue Ingrowth into Porous Ceramics" at the International Conference on "Materials, Prosthetics, and Aids for the Handicapped," Liverpool, England, on Mar. 22.

S. F. Hulbert presented a seminar entitled "Materials and Design Considerations for the Attachment of Orthopedic Appliances to the Musculo-Skeletal System" at the University of Oxford, Oxford, England on Mar. 23.

S. F. Hulbert, J. J. Klawitter (Asst Prof), and B. W. Sauer presented a paper entitled "Attachment of Prostheses to the Musculo-Skeletal System by Tissue Ingrowth and Mechanical Interlocking" at the Clemson University Symposium on Materials and Design Considerations for the Attachment of Prostheses to the Musculo-Skeletal System, Apr. 3.

R. B. Leonard (Asst Prof), B. W. Sauer, S. F. Hulbert, and J. Per-Lee (Emory University), presented a paper entitled "Use of Porous Ceramics to Obliterate Mastoid Cavities" at the Clemson University Symposium on Materials and Design Considerations for the Attachment of Prostheses to the Musculo-Skeletal System, Apr. 3.

INTERDISCIPLINARY STUDIES (Continued)

J. J. Klawitter (Asst Prof) served as director for a workshop on Bio-Evaluation of Hard Material Implants and B. W. Sauer (Asst Prof) served as director for a workshop on Use of Ceramics for Alveolar Ridge Augmentation at Clemson University's Symposium on Materials and Design Considerations for the Attachment of Prostheses to the Musculo-Skeletal System on Apr. 5 and the following papers were presented at the Symposium:

J. J. Klawitter and S. F. Hulbert, "Research Techniques for the Bio-Evaluation of Hard Material Implants," Apr. 4.

B. W. Sauer, J. J. Klawitter, and S. F. Hulbert, "Choice of Animal Models for Evaluation of Orthopedic and Oral Appliances," Apr. 4.

D. D. Moyle (Asst Prof), J. J. Klawitter, and S. F. Hulbert, "Mechanical Properties of the Bone-Porous Material Interface," Apr. 7.

F. W. Cooke (Assoc Prof), "Fracture Mechanics of Bone," Apr. 5

S. F. Hulbert, J. J. Klawitter, and W. C. Richardson, Jr. (Grad Stu) presented a paper entitled "Soft Tissue Response to a Dense Ceramic with Varying Surface Characteristics" at the Third Annual Meeting of the Biomedical Engineering Society, Baltimore, Md., Apr. 7.

H. Metzger (Visiting Prof) and S. F. Hulbert presented a paper entitled "Impulse Testing with Different Oxygen Concentrations for Analyzing Transfer Function of Brain Oxygen Tension" at the Third Annual Meeting of the Biomedical Engineering Society, Baltimore, Md., Apr. 7.

S. F. Hulbert has been appointed a consultant to the Environmental Protection Agency, National Environmental Research Center, Cincinnati, Ohio, for the purpose of advising on research contract applications in the area of solid waste management.

LANGUAGES

At the April 8th meeting of the American Association of Teachers of French, Harry E. Stewart (Prof and Hd) was elected Vice-President of the Association.

Edwin Arnold (Instr) was elected President of the American Association of Teachers of German.

Harry E. Stewart was also appointed Program Chairman for the South Carolina Conference of Foreign Language Teachers.

MATHEMATICAL SCIENCES

C. Bradley Russell (Asst Prof) addressed the Greenville Chapter of the American Production and Inventory Control Society on Apr. 3. The topic of his address was "Economic Order Quantity Models with Price Breaks."

William H. Ruckle (Assoc Prof) attended a conference at Louisiana State University on Nuclear Spaces and Operator Ideals on Apr. 4-8, and presented a talk entitled "Lummability of Biorthogonal Expansion." Andrew F. Sobczyk (Martin Prof) attended the conference as an invited participant and took part in the discussion session.

W. Robert Boland (Asst Prof) published a paper entitled "The Convergence of Product-type Quadrature Formulas," in SIAM J. Num. Anal., Vol. 9 (1972): 6-13.

John Kenelly (Prof and Hd) delivered an address at the Pi Mu Epsilon banquet at Southeastern Louisiana University, Hammond, La., on Apr. 13. The title of his address was "Linear Optimization and Geometry."

The Dept. of Mathematical Sciences has been awarded a grant of \$18,894 from the South Carolina Commission on Higher Education for an In-Service Program for the Training of Supervisors of Mathematics. This institute will be directed by James L. Flatt (Assoc Prof) and will be held June 12 - Aug. 11.

MUSIC

Edmund W. Winston (Instr) and Donald K. Freeman (Dir of Mental Health) have been awarded a grant from the Clemson Faculty Research Committee for an application entitled "An Interdisciplinary Research Program Concerning the Respiratory and Cardiovascular Physiology of Playing Woodwind Instruments."

PHYSICS

Carlton W. Ulbrich (Asst Prof) has been awarded a post-doctoral fellowship for the academic year 1972-73 by the National Center for Atmospheric Research at Boulder, Colo. The post-doctoral program will consist of one year of study and research in atmospheric physics.

R. I. Miller (Grad Stu) and C. W. Ulbrich have published the following paper in Cryogenics entitled "Time Response and Thermal Diffusivity of Carbon Resistance Thermometers."

PHYSICS (Continued)

M. J. Skove (Prof), D. R. Overcash (former Grad Stu), C. L. Watlington (Grad Stu), and E. P. Stillwell (Prof and Hd) published an article entitled "Temperature Dependence of the Critical Current in Tin and Indium Whiskers" in the October 1971 issue of Physica.

J. R. Manson (Asst Prof) had an article entitled "Simple Model for the Accommodation Coefficient" published in the Journal of Chemical Physics recently.

SOCIAL SCIENCES

W. C. Capel (Asst Prof) has published (with Clark, et al.,"Wives, Families and Junk: A Comparative Study of Wives of Heroin Addicts Maintained on Methadone." In Journal of Drug Issues, January, 1972.

S. N. Cole (Assoc Prof) presented "Variety and Incidence of Sleep Disturbances in College Students," at the meetings of the American Student Health Association, Atlanta, Ga., Apr. 4-5.

The following papers were presented at the meetings of the Southwestern Sociological Association, San Antonio, Texas, Mar. 30-Apr. 1:

W. C. Capel (Asst Prof) and Bernard Caffrey (Assoc Prof), "Sociopsychological Correlates of Recent Study of Sex Attitudes: Who Changes?" and "We'd Rather Fix than Switch: Sociopsychological Correlates of Members of an Orphaned Automobile Club."

D. H. Smith (Instr), "Who Wins, the Credible or the Competent?: An Evaluation of the Strengths of Communicator Credibility versus Task Competency in Perceiving Task Performance."

D. H. Smith and R. A. Rimkus (Asst Prof), "An Evaluation of the Use of Simulation Games as Teaching Devices."

R. J. Knapp (Asst Prof), "A Factor Analytic Study of Alienation, Anomia, Authoritarianism, Status Concern, and the Tendency-to-Discriminate in a Southern College Population." The paper was also published in Sociological Abstracts, supplements 21-22, May, 1972.

R. N. Pippin (Inst), "The Effects of Limited Physical Mobility on the Aged in Poverty Areas of Greenville, S. C., 1971."

SOCIAL SCIENCES (Continued)

The following papers were presented at meetings of the Southwestern Social Science Association, San Antonio, Tex., Mar. 30-Apr. 1:

J. L. Arbena (Asst Prof), "Jose Victorino Lasterria and the Principles of Primary Education."

R. A. Rimkus (Asst Prof), "Organizational Characteristics of the Quarantine Decisional Process."

CALENDAR OF CAMPUS EVENTS

May 2	Tues.	Continuing Education seminar, "Minicomputer Applications in Business and Industry," Clemson House, sponsored by Department of Electrical and Computer Engineering.
May 2	Tues.	Baseball - Georgia at Clemson.
May 3	Wed.	Baseball - at Georgia Tech.
May 5	Fri.	Commencement.
May 5	Fri.	Baseball - at Wake Forest.
May 5	Fri.	Joint Army and Air Force Commissioning Ceremony.
May 5- May 6	Fri.- Sat.	Outdoor Track - State Meet at Columbia.
May 6	Sat.	Baseball - at Virginia.
May 7	Sun.	Baseball - at Virginia.
May 8	Mon.	Baseball - at Virginia.
May 10	Wed.	Baseball - at Maryland.
May 11	Thurs.	Baseball - at Maryland.
May 12	Fri.	Baseball - at Maryland.
May 12- May 13	Fri.- Sat.	Outdoor Track Meet at Charlottesville, Va.
May 14	Sun.	Mother's Day.
May 15	Mon.	Registration - First Session Summer School - all students.
May 15- May 19	Mon.- Fri.	Southern Pasture and Forage Crops Improvement Conference, College of Agricultural Sciences.
May 16	Tues.	Classes begin.

STATUS OF APPLICATIONS TO GRADUATE SCHOOL AS OF APRIL 18, 1972
FOR ADMISSION IN AUGUST 1972

MAJOR FIELD	NO. APPLTNS.	ACCEPTED	AV. GRE	AV. GPR	ACTIVE
Agricultural Economics	14	3	1000	3.16	10
Agricultural Engineering	4	1	1400	3.09	3
Agronomy	6				6
Animal Physiology	1				
Animal Science	3	1		2.63	1
Entomology	12	8	1011	2.77	3
Horticulture	7	4	1170	3.57	3
Nutrition	4				4
Plant Pathology	5	1	890	3.25	4
Plant Physiology	3	1			2
Poultry Science	1				1
Wildlife Biology	6	1	950	2.47	5
Architecture	24				22
City and Regional Planning	5				4
Visual Studies	4				4
Education Non Degree	3	1			2
Ed Adm Supr	6	3		2.78	1
Elementary Education	2	2	980	2.99	
Industrial Education	7	3	1040	3.09	3
Personnel Services	13	10	1110	3.03	2
Reading	2				
Secondary Education	19	9	1130	3.27	5
Bioengineering	20	3	1286	2.73	10
Ceramic Engineering	3	2	1295	3.82	1
Chemical Engineering	51	18	1155	3.14	15
Civil Engineering	18	6	1074	3.14	10
Electrical Engineering	28	10	1140	3.21	14
Engineering Mechanics	3	1	1120	3.13	2
Environmental Systems Engineering	39	14	1180	3.02	21
Materials Engineering	5				3
Mechanical Engineering	14	3		3.10	7
Systems Engineering	4	1	1060	3.68	3
Water Resources Engineering	12	4	1066	2.70	7
Economics	7				6
Engineering Management	13	2	1115	2.53	6
Management	13	3	1095	2.94	8
Textile and Polymer Science	7	1			3
Textile Chemistry	13	2	1120	3.05	7
Textile Science	13	1	960	3.18	9
English	12	6	960	3.58	6
History	7	4	1122	3.11	3
Biochemistry	2				2
Botany	7	1	1160		4
Chemical Physics	1				
Chemistry	20	9	1091	2.98	10
Mathematics	119	56	1151	3.42	48
Microbiology	10	6	1094	3.17	4
Physics	18	8	1120	3.25	7
Zoology	27				23
Forestry and Recreation (undeclared)	1	1			
Forestry	4	1	1200	2.77	3
Recreation and Park Administration	16	9	1130	2.94	4
TOTALS	658	220	1128	3.17	331

PROCEDURES FOR SUBMITTING NEWSLETTER MATERIAL

All Calendar items of campus events (speakers, films, meetings, seminars, sporting events, etc.) should be submitted by written memorandum directly to the Office of Public Relations, Trustee House. Information and news items from the Office of the President, Vice President for Business and Finance, Vice President for Executive Affairs, Vice President for Student Affairs and the Vice President for Development should be submitted by written memorandum to the Office of Public Relations, Trustee House. Information and news items from all areas under the Vice President for Academic Affairs should be submitted by written memorandum to Dr. Claud B. Green, Room 28, Tillman Hall.

The following deadlines prevail: Items to appear in the Newsletter published the 1st of each month must be submitted by the 20th of the previous month; items to appear in the Newsletter published the 15th of each month must be submitted by the 5th of each month.

CLEMSON

CLEMSON UNIVERSITY LIBRARY
SOUTH CAROLINA ROOM

NEWSLETTER

INFORMATION FOR THE STAFF OF CLEMSON UNIVERSITY

Vol. 11 No. 19

May 15, 1972

RECORD NUMBER GRADUATES FROM UNIVERSITY

Clemson University reached an educational milestone by awarding its 25,000th degree at 76th Commencement exercises. A total 833 degrees, also a Clemson record, were presented. Recipient of the 25,000th diploma, a bachelor of arts degree in secondary education, was James M. Sterling of Newberry.

Clemson President Robert C. Edwards conferred seven associate in arts, 713 bachelor, 106 master and seven doctoral degrees. Clemson has awarded 1,579 degrees since graduation a year ago and 25,673 in its history. (Continued on page 2.)



THESE CLEMSON GRADUATES, shown with President Edwards, were given special recognition at the University's 76th Commencement. They are (L-R), Joe F. Anderson Jr., Edgefield, recipient of the Norris Medal for the best all-around student on the basis of leadership ability and exceptional scholastic achievement; Mrs. Annie B. Brown, Walhalla, Faculty Scholarship Award to the graduate with the highest scholastic achievement; and James M. Sterling, Newberry, recipient of Clemson's 25,000th diploma.

RECORD NUMBER GRADUATES FROM UNIVERSITY Continued

Two hundred and eleven students -- about 25 per cent of the graduating class -- were cited for outstanding scholastic achievement. One hundred and nineteen cadets were commissioned second lieutenants.

Seventeen students were graduated with highest honor, which requires a cumulative grade point average of 3.8 to 4.0 (4.0 is all A's).

One of Clemson's top awards, the Norris Medal for best all-around student, went to Joseph F. Anderson Jr., political science major from Edgefield.

The faculty scholarship award for the graduate with the highest academic achievement went to Annie Bailes Brown, elementary education major from Walhalla who had a perfect 4.0 grade point average.

SIX PROFESSORS EARN EMERITUS TITLES

Six professors whose service to the University totals almost two centuries were awarded emeritus titles May 4 during special faculty recognition ceremonies.

Named associate professor emeritus of agricultural education was William C. Bowen, a Pickens native and Clemson graduate ('32) retiring after 38 years. He is the author of several publications on forest management and an expert on tree planting, insects and diseases.

William J. Barker, faculty member since 1942, received the title of professor emeritus of forestry. Born in Alamance County, N.C., Barker has been a regular contributor to "The Progressive Farmer" and has authored numerous publications on forest management, marketing and protection.

A Mullins native, Herman N. Felder Jr., was named associate professor emeritus of English. He began teaching at Clemson in 1946 following 10 years as a junior college instructor. Felder was also a South Carolina school principal from 1930-35.

Retiring after 29 years, Edward L. Stanley was given the title of associate professor emeritus of mathematical sciences. Stanley is a native of Oneida, Tenn., and former teacher, principal, and superintendent in Tennessee public schools.

Edward C. Coker Jr. received the title of associate professor emeritus of mathematical sciences. Coker, born in Rock Hill, taught five years in Columbia and Greenville schools before coming to Clemson in 1936.

Kenneth L. Wood, born in Albion, N.Y., was named associate professor emeritus of physics. His 36-year teaching career includes positions at Western Carolina University and Carson Newman College.

PHYSICAL PLANT DIVISION PROMOTES DILLARD

Sam A. Dillard of Westminster, now in his 10th year with the University's physical plant division, has been promoted to resident construction engineer. Since 1965 Dillard has been supervisor of preventive maintenance with the physical plant division. He joined the staff in April, 1963, as maintenance mechanic.

PHYSICAL PLANT DIVISION PROMOTES DILLARD Continued

In his new position, Dillard's primary function will be to serve in a liaison capacity between the University and contractors and architects on new campus construction.

STEARNS APPOINTED HEAD OF TEXTILES

Dr. Edwin I. Stearns of New Jersey, the research scientist who pioneered the use of computers in color matching, will become the new head of the department of textiles at Clemson University July 1. Stearns, considered among the world's authorities in color science and dyestuffs, is currently a research associate with American Cyanamid Company's plant at Bound Brook, N.J. He joined the company as a student trainee in 1933.

His Clemson appointment is announced by Dr. Wallace D. Trevillian, dean of the College of Industrial Management and Textile Science. "Dr. Stearns is joining the field of higher education after a brilliant 39-year career in industry," said Dean Trevillian. "He will be a strong asset to our program."

Stearns received his Ph. D. from Rutgers University ('45), with a major in physical chemistry and minor in organic chemistry. His membership in scholastic fraternities includes Phi Beta Kappa, Sigma Xi, Tau Beta Pi, and Alpha Chi Sigma.

HURST RECEIVES CITATION

Dean Victor Hurst, Vice President for Academic Affairs, is recipient of a special citation by the Clemson Chapter of the American Association of University Professors (AAUP) for his work during the past two years on revision of the University's Faculty Manual. The award, first of its kind in the chapter's history, is for "his outstanding contributions to increasing the voice of Clemson's faculty in matters of university governance."

S.C. RETIREMENT LAW AMENDED TO CREDIT MILITARY SERVICE

On March 16, 1972, State Law was amended to make it possible for a member of the S.C. Retirement System to establish credit for military service completed prior to enrollment in the System. Formerly military service could be credited only (a) if it had been performed subsequent to State employment and (b) if the member had returned to covered State employment within two years after separation from active duty.

The following conditions must be met for this credit to be established:

(1) The member must complete two years of active employment as a member of the S.C. Retirement System for each year of previous military service to be credited.

(2) The member must have been separated from military service under conditions other than dishonorable.

(3) The member must apply directly to the S.C. Retirement System for credit for such military service, and furnish two documents: (1) a certified copy of the military discharge showing the dates of active military service, and (2) a certificate from the appropriate employer showing the date he (or she) first became a member of the S.C. Retirement System and the monthly rate of earnable compensation effective on that date.

S.C. RETIREMENT LAW AMENDED TO CREDIT MILITARY SERVICE Continued

(4) The member must make a single lump-sum payment, prior to death or retirement, of all employee contributions he would have been required to make for the period to be so credited had he been employed at the rate of his earnable compensation when he first became a member of the S.C. Retirement System, plus regular interest from the date the contributions would have been made to the date the lump-sum payment is made.

(5) No contributions are required to establish credit for service prior to July 1, 1945, but such prior service cannot be credited separately from all eligible service performed after June 30, 1945 (for which appropriate payment must be made).

(6) No member may receive credit in the S.C. Retirement System for more than six years of military service.

ALUMNI REUNION WEEKEND IS JUNE 8, 9, 10 and 11

Another big reunion weekend is scheduled for Thursday, Friday, Saturday and Sunday --- June 8, 9, 10 and 11.

The annual Clemson Alumni Banquet this year will be held in Harcombe Commons on Saturday evening, June 10 at 6:30 o'clock. It is at this occasion that five alumni receive the Association's highest award --- the Distinguished Service Award --- for 1972.

Tickets are now available at the Alumni Office and are \$5.00 per person. If you plan to attend the banquet pick up your ticket now and avoid the lines during reunion weekend.

The General Assembly of Alumni will convene at 2:30 p.m. on Saturday, June 10 in the Daniel Hall Theatre. The program will include remarks from University President Robert C. Edwards and an athletic report from Athletic Director Bill McLellan. National Alumni President Thomas C. Breazeale of Knoxville, Tennessee will preside. The ladies meanwhile will be treated to a fashion showing of the latest in women's apparel at the Clemson House.

CALENDAR OF CAMPUS EVENTS

May	15-	Mon.-	Southern Pasture and Forage Crops Improvement Conference, College of Agricultural Sciences.
May	19	Fri.	
May	15	Mon.	Registration - First session summer school, all students.
May	16	Tues.	Classes begin.
May	26	Fri.	Outdoor Track - Meet of Champions at Houston, Texas.
May	28	Sun.	Trinity Sunday.
May	29	Mon.	Memorial Day.

1972-73 SENATE MEETING SCHEDULE AND COMMITTEE ASSIGNMENTS

At the meeting of the Advisory Committee of the 1972-73 Faculty Senate on April 18 the coming year's schedule of meetings for the Senate was set as follows:

- | | |
|-----------------------|-----------------------|
| 1. May 16, 1972 | 7. November 14, 1972 |
| 2. June 13, 1972 | 8. December 12, 1972 |
| 3. July 11, 1972 | 9. January 9, 1973 |
| 4. August 22, 1972 | 10. February 13, 1973 |
| 5. September 12, 1972 | 11. March 13, 1973 |
| 6. October 10, 1972 | 12. April 10, 1973 |

All meetings will be at 4:15 P.M. in the auditorium of Olin Hall.

Except for executive sessions all meetings of the Faculty Senate are open to any member of the Academic Faculty. Such visitors may be invited by any member of the Advisory Committee to participate in particular discussions. Also, any member of the Academic Faculty may present any problem or suggestion to the Faculty Senate for its consideration provided the member notifies the President of the Senate at least one week prior to the meeting at which he would like to appear.

Assignments to standing committees of the Faculty Senate for 1972-73 are as follows:

Welfare Committee:

W. E. West, Chairman, Industrial Education
D. O. Ezell, Horticulture
W. Baron, Civil Engineering
Sophia Sullivan, Library
F. B. Brown, Chemistry
R. L. Cross, English
Veronica Carmack, Home Economics

Admissions and Scholarship Committee:

J. C. Fanning, Chairman, Chemistry
B. M. Cool, Forestry
W. E. Johnston, Experimental Statistics
J. A. Hash, Agricultural Education
W. F. Beckwith, Chemical Engineering
E. A. Vaughn, Textiles
A. L. Recoulley, English
P. T. Holmes, Mathematics

Policy Committee:

W. E. Castro, Chairman, Engineering Mechanics
T. E. Skelton, Entomology and Economic Zoology
A. H. Holt, English
Rose Godbout, Nursing
E. P. Arnold, Languages

1972-73 SENATE MEETING SCHEDULE AND COMMITTEE ASSIGNMENTS (Continued)Research Committee:

M. D. Sherrill, Chairman, Physics
N. D. Camper, Plant Pathology and Physiology
J. R. Hill, Animal Science
T. R. Adkins, Entomology and Economic Zoology
A. R. Abernathy, Environmental Systems Engineering
N. R. Bauld, Engineering Mechanics
W. F. Steirer, History
K. T. Wallenius, Mathematics

Advisory Committee:

E. B. Rogers, Chairman, Agricultural Engineering
B. J. Skelton, Horticulture
T. E. Skelton, Entomology and Economic Zoology
V. S. Hodges, Architecture
W. E. West, Industrial Education
W. E. Castro, Engineering Mechanics
B. M. Cool, Forestry,
E. A. Vaughn, Textiles
W. F. Steirer, History
S. Sullivan, Library
R. A. Godbout, Nursing
J. C. Fanning, Chemistry
J. D. Fulton, Mathematics

DISNEY WORLD AND DISNEYLAND DISCOUNTS

Discounts for Disney World and Disneyland are now available to Clemson faculty and staff members. Your "club" membership card, which entitles you to the discount, is available at no charge from Dr. Corinne Sawyer, 416 Strode Tower, who has agreed to act as coordinator on behalf of the staff.

Discounts vary from year to year, for 1972 there is a discount rate on books of tickets (admission to the park, use of transport systems, and rides) available until June 1. There is also a much-reduced rate on a three-day "tour package," which includes lodging, some meals, ticket books for rides and attractions, and use of the transport system (mono-rail, trams, and water transport); this package rate is good until January 1, 1973. At that time we will no doubt be notified of the discount schedules for 1973, and you will be advised through the Newsletter of these rate reductions.

When applying for your club membership, be sure to give Dr. Sawyer notification of your complete home address, for the Disney Corporation's records. Only one club card is needed per family, for with it you can purchase as many discount packages as you need, as long as the card remains valid.

MINUTES OF THE MEETING OF THE UNIVERSITY LIBRARY COMMITTEE, APRIL 4

Present: M. W. Jutras (Chairman), W. E. Bachop, R. J. Calhoun, Elizabeth Galloway, Ralph Knowland, R. E. Schoenike, M. D. Sherrill, D. B. Stafford, J. M. Wannamaker, Patrick R. Watts (Student Representative), J. W. G. Gourlay (Secretary).

1. Minutes of the meeting of March 7 were approved.
2. Termination of Ad Hoc Committees:
Ad Hoc Committee on the Use of the Library
Ad Hoc Committee to Investigate Library Orientation

Mr. Gourlay reported that a draft of the Freshman slide-tape orientation lecture had been given to Mr. Harry Durham for his criticism and suggestions. Also, he had obtained from Mr. Durham a list of the equipment items needed and had submitted this list in a budget request.

3. Placing of Books in Storage
Dr. Jutras submitted a proposal regarding this matter which, after discussion and some modification, was adopted as follows:

Proposal: That the Library Committee and the appropriate Library Staff institute a review of the holdings in the Science and Technology Division of the Library, in order to cull unnecessary surplus, or out-of-date (but not historically-significant) texts, books or monographs.

The Library Committee will contact, through the appropriate academic dean, the department head of each discipline involved, requesting the appointment of a committee of members of that discipline to work with Mrs. Peggy Cover in advising on which texts should be retained and which should be placed in storage. A faculty or staff member would be able to have a book retrieved from storage and placed in the stacks at any time.

Opportunities will be provided to other staff in the discipline involved or in related disciplines to review the committees' decisions prior to final action. Details of these operations will be coordinated by Mrs. Cover and carried out under Mr. Gourlay's supervision.

4. Library Security
Dr. Schoenike presented a Report of a Subcommittee to the Clemson University Library Committee.

Since this was a very detailed report, Dr. Schoenike outlined its contents and requested that it be studied by each committee member before being discussed at the next meeting of the University Library Committee, April 27, 3:30 P.M.

MINUTES OF THE HONORS COUNCIL MEETING, APRIL 19, 1972

The meeting was called to order at 3:30 P.M. Minutes of the meeting of January 31 were approved as distributed.

The chairman introduced Dr. W. C. Godley, Professor of Animal Science, who will become chairman of the council on July 1, 1972.

Dr. Maxwell reported that the committee to study evaluation procedures for honors courses is still at work and may have something developed for use next year.

The chairman reported that an attempt to publicize honors courses through class advisers at pre-registration was moderately successful.

Agric. H-202, approved by the council at its last meeting, has received approval of the Educational Council.

The council discussed and approved a revised departmental honors program in Mathematical Sciences, including the offering of a new honors section, Math H-452.

Dr. Maxwell briefly outlined a departmental honors program being developed by the College of Agricultural Sciences. Action will be taken on this program at a later date.

Dr. Wannamaker pointed out that each of the language courses listed in the Honors Program Student Handbook should reflect a value of 4 credits (3 and 1). In addition, 3-credit courses at the 201-202 level should be included in future printings under French, German, and Spanish.

The chairman noted that a final meeting of the council will be held after graduation to approve the awarding of Junior Division Honors Program Certificates for the second semester.

The meeting was adjourned at 4:00 P.M.

Present: Norman Olsen, Jr., (Chairman), Peter Lee, M. A. Packer, R. D. Shannon, J. D. Maxwell, Patricia Wannamaker, and Melody Baker.

AGRICULTURAL ECONOMICS AND RURAL SOCIOLOGY

W. J. Lanham (Prof and Hd) has been appointed by Governor West to the Agricultural Advisory Committee of the Coastal Plains Regional Commission.

SCHOLARSHIPS AND AWARDS COMMITTEE MEETING

1. The sixth meeting of the Scholarships and Awards Committee for 1971-72 was held in Room 205 Strode Tower at 1:30 P.M., Friday, April 21. Present: Norman Olsen, Jr. (Chairman), J. D. Davenport, R. H. Hunter, J. T. Lazar, W. C. Whitten, A. M. Bloss, G. E. Coakley, Susan Delony, Carl Poe, Jerome Wells.
2. The chairman announced that Dr. W. C. Godley, Professor of Animal Science, will assume the chairmanship of this committee on July 1.
3. The progress to date in awarding Poole Scholarships was discussed.
4. It was moved and seconded that the plan proposed by Dr. Bauld's committee for utilization of interest from the Daniel Memorial Fund for academic scholarships be forwarded to the President for his consideration. The motion carried unanimously.
5. The committee approved the sophomore, junior, and senior scholarship recipients as previously confirmed by the academic deans.
6. The chairman asked all present to consider prospective recipients for the Norris Medal, to be selected on May 3.
7. The chairman thanked all committee members for their efforts in making Honors and Awards Day a success.
8. Dean Delony asked that the Alpha Lambda Delta Book Award be presented at the President's luncheon, along with other university-wide awards, in the future. The matter will be referred to the new chairman for his consideration.
9. The meeting was adjourned at 2:30 P.M.

COLLEGE OF ARCHITECTURE

John T. Acorn (Assoc Prof) has received and accepted a position as Artist-in-Residence at the MacDowell Colony in New Hampshire for the month of May.

Professor Acorn has also had a piece of sculpture selected for the fifth annual "Mainstreams of U.S.A.," an international competitive exhibition for painting and sculpture at the Grover M. Hermann Fine Arts Center, Marietta, Ohio.

SCHOLARSHIPS AND AWARDS COMMITTEE MEETING

1. The seventh meeting of the Scholarships and Awards Committee for 1971-72 was held in Room 205 Strode Tower at 2:00 P.M., Friday, April 28. Present: Norman Olsen, Jr. (Chairman), J. D. Davenport, Susan Rockwell, N. R. Bauld, R. H. Hunter, W. C. Whitten, A. M. Bloss, G. E. Coakley, Susan Delony, K. N. Vickery.
2. The chairman announced progress on Poole Scholarship recipients, and the committee considered additional potential recipients in case those to whom the scholarships have been offered refuse them. Five potential recipients were listed in the following order:

Robert W. Aldred	Statesboro, Georgia
Elizabeth R. Walke	Aiken
Warren R. Hayslip	Spartanburg
Bertram T. Lyles	Spartanburg
Basil P. Pushkar	Greenwood
3. The chairman noted a letter received from President Edwards informing the committee that he will submit the plan for use of income from the Daniel Memorial Fund for academic scholarships to the Board of Trustees for their consideration.
4. It was moved and seconded that in the future we dispense with letters to alumni requesting information about potential Poole Scholars. In discussion, it was made clear that the procedure is not only time-consuming but virtually fruitless. Of ten letters requested this year, we received only two replies. Of those received in the last two years and, as far as is known, in any prior year, none has proven to be negative. The motion carried unanimously.
5. The committee was again reminded to consider potential Norris Medal recipients before the May 3 meeting.
6. The meeting was adjourned at 2:30 P.M.

COLLEGE OF ENGINEERING

L. G. Rich (Dean) is a member of the Board of the American Association of Professors in Sanitary Engineering and attended a meeting of that group at Purdue University, Lafayette, Ind. on Apr. 30 - May 3.

MINUTES OF THE MEETING OF THE UNIVERSITY AUDIO-VISUAL COMMITTEE

The fifth meeting of the University Audio-Visual Committee was held in Room 108 Strode Tower. The following members of the committee were present: William F. Beckwith, Thomas Douglass, M. W. Jutras, Sarah Walker, Sam Wang, and Betty Watkins.

The minutes from the previous meeting on February 15th were distributed, corrected, and approved.

Chairman Jutras called for reports from the sub-committees. Sam Wang, Chairman of the Sub-committee on Academic Communications Courses, reported that his sub-committee had requested that one person in each college investigate the audio-visual courses in his college at the present and in the future. Wang said that the results of the questionnaires which his sub-committee had prepared showed that there is a desire for a course not only on audio-visual hardware and a laboratory on how to use this hardware, but also a course on the philosophy and psychology of using audio-visual materials, the persuasive use of audio-visual hardware. Wang said that his sub-committee recommended that a sub-committee be established every two years to re-evaluate the audio-visual course situation and to make suggestions. Wang so moved; Douglass seconded the motion, which carried unanimously.

Betty Watkins, Chairman of the sub-committee on Centralized Audio-Visual Services, asked for a postponement of her report.

Chairman Jutras reported on Harry Durham's plans for the establishment of a service of audio-visual equipment loan and repair and if satellite a/v centers to be established at other locations. The Committee unanimously endorsed Durham's report.

The next meeting will be held on Tuesday, April 18th, at 3:30 P.M., in 108 Strode.

The meeting was adjourned at 4:30 P.M.

COLLEGE OF ENGINEERING

S. F. Hulbert (Assoc Dean) presented a seminar entitled "New Design Concepts for the Attachment of Prostheses to the Musculo-Skeletal System," to the Orthopedic Staff of Richland Memorial Hospital, Moore Clinic, and Fort Jackson, Apr. 19 in Columbia.

CHEMISTRY

The following paper was presented at the Federation of American Societies for Experimental Biology in Atlantic City, N. J., Apr. 9-14 by Gary L. Powell (Asst Prof) and Joseph E. Sabaitis (Grad Stu): "Amino Acid Dependent Control of Phospholipid Biosynthesis in Stringent and Relaxed Strains of Escherichia Coli."

Joe L. von Rosenberg (Assoc Prof) presented a seminar at the Citadel, Charleston, Apr. 10, entitled: "Mechanisms of Concerted Reactions."

The following seminars have been presented recently: G. L. Powell (Asst Prof), "Use of Radiotracers in Elucidating Fat Metabolism in Bacteria," S. C. State College, Natural Sciences Dept., Orangeburg, Apr. 21.

J. F. Allen (Assoc Prof), "New Teaching Techniques in Chemistry," Chemistry Dept., Western Carolina University, Cullowhee, N. C., Apr. 21.

A. L. Beyerlein (Asst Prof), "Thermal Diffusion in Binary Liquid Mixtures," Chemistry Dept., University of N. C. - Charlotte, Apr. 24.

CIVIL ENGINEERING

Rudolf E. Elling (Assoc Prof) and Jackson S. Love (Asst Prof) will participate in a seminar on the revised code of the American Concrete Institute. The seminar for approximately 60 engineers and architects is co-sponsored by the Dept. of Civil Engineering and the Portland Cement Association and will be held at Greenville Tec, June 9-10.

T. Bruce Yandle (Asst Prof and Hd, Economics) and Herbert W. Busching (Assoc Prof and Hd, CE) have had their paper, "Communicating Housing Needs," published in the Proceedings of the Second International Symposium on Lower-cost Housing Problems. The symposium was held in St. Louis on Apr. 24-26.

J. Edwin Clark (Assoc Prof) participated in a MAST (Military Assistance to Safety and Traffic) advisory committee meeting in Columbia on Apr. 18. This committee is exploring the feasibility of utilizing military helicopters and service paramedical personnel to respond to civilian medical emergencies in South Carolina.

Billy L. Edge (Asst Prof) has been appointed an Affiliate Marine Scientist of the South Carolina Marine Resources Center, Charleston. The appointment was made by Dr. James Timmerman, Director of the Marine Resources Center.

CIVIL ENGINEERING (Continued)

The Spanish Edition of the civil engineering textbook, "Structural Steel Design," by Jack C. McCormac (Assoc Prof), published by Intext, Scranton, Pa., was available on May 4. The second English edition of this book was published in Aug., 1971. It is used by 153 American universities, plus several foreign countries. The second edition of Professor McCormac's textbook, "Structural Analysis," published in 1967, is also used by 90 American universities, plus several foreign countries.

Billy L. Edge (Asst Prof) presented a paper to the International Symposium for Mathematical Modeling Techniques in Water Resources Systems in Ottawa, Canada, May 8-13, entitled "Mathematical Technique for Siting Large Thermal Power Plants on Industrialized Estuaries."

Jackson S. Love (Asst Prof) with S. H. Advani, T. J. Tarnay, and E. F. Byars (West Virginia University) will present a technical paper to the Conference on Advances in Aerospace Medicine in Miami, Fla., May 8, entitled "A Model for Predicting Aortic Dynamic Response to Minus G_z Impact Acceleration."

Myron Spector (Asst Prof) was awarded a NASA-ASEE Faculty Fellowship to the Manned Spacecraft Center at Houston, Texas, June 1 - August 1. Dr. Spector will participate in the biomedical engineering program.

COLLEGE OF ENGINEERING

L. C. Wilcox (Assoc Dean) was an invited speaker at the meeting of the Association for Systems Management, in Greenville on Apr. 25. The subject of the discussion was related to the economics of computing, with particular emphasis on the design and operation of small, time-sharing equipment.

L. C. Wilcox served as the Session Chairman on the subject of Bioengineering at "SOUTHEASTCON" held in Knoxville, Tenn. on Apr. 9-11. Dr. Wilcox served as judge with Dr. Harold Chestnut from General Electric, in the final student IEEE paper contest.

TRI-COUNTY STATE EMPLOYEES' BANQUET

The Tri-County (Anderson, Oconee, and Pickens) State Employees' Banquet will be held on May 26 at 7:30 P.M. at the Southern Restaurant, Easley. The cost per ticket is \$3.25, and they can be obtained from G. W. Brandt, 125 Plant and Animal Science Bldg., L. C. Hamilton, 110 Plant and Animal Science Bldg., M. H. Sutherland, 113 Long Hall or Ray L. Thompson, Personnel Division. Tickets should be obtained by noon May 24.

COLLEGE OF EDUCATION

H. F. Landrith (Dean) was a member of the Southern Association Evaluation Committee at Conway High School.

James E. Mathews (Assoc Prof) served as a member of the Southern Association Evaluation Committee at Aiken High School.

COLLEGE OF ENGINEERING - Continuing Education

A seminar on "The 1971 American Concrete Institute (ACI) Code" will be presented June 9-10 at Greenville Technical Education Center, Greenville. The seminar is jointly sponsored by the Dept. of Civil Engineering, and the Portland Cement Association, Atlanta, Ga.

Appearing on the program will be H. W. Busching (Assoc Prof and Hd, Dept. of Civil Engineering), R. E. Elling (Assoc Prof, CE), D. W. Musser, Professional Engineer, Portland Cement Association, Atlanta, Ga., R. F. Denkins, Professional Engineer, PCA, Orlando, Fla., Paul Zia, Professional Engineer, Dept. of Civil Engineering, N. C. State University, Raleigh, and Jack Love (Asst Prof, CE).

Additional information may be obtained from Professor R. A. Banister, Director, Continuing Education, College of Engineering, 116 Riggs Hall, or from Dr. R. E. Elling.

COLLEGE OF INDUSTRIAL MANAGEMENT AND TEXTILE SCIENCE

H. M. El-Behery, Acting Dir of Professional Development, was chairman for twin seminars held in New York City at the Union League Club, Apr. 11-12. They were entitled "Knitting and Warp Knitting" and "Preparation and Weaving of Textured Yarns." W. D. Trevillian (Dean), T. D. Efland (Assoc Dean) and H. Betts Wilson (Field Representative) also participated in the seminars.

A two day conference, "False-Twise Textured Yarns," was held Apr. 25-26. H. M. El-Behery was the chairman.

Frederick T. Simon (J. E. Sirrine Prof) was chairman for a "Basic Color Science" seminar, May 1-3.

"Introduction to Textile Manufacturing" was the title of a Professional Development Program held in Sirrine Hall, May 2-4. J. C. Hubbard, Jr. (Prof) was the chairman.

The College sponsored a program entitled, "Application of Computers to Color Science," May 8-12. F. T. Simon was the chairman for the program.

COLLEGE OF NURSING

Rose Godbout (Assoc Prof) has been appointed as a Veterans' Administration Consultant in "Phenomenology and Community Nursing" to the Veterans' Administration Hospital in Northport, Long Island, N. Y.

ECONOMICS

Bruce Yandle (Asst Prof and Hd), and Herbert Busching (Assoc Prof and Hd, Civil Engineering) participated in the State Housing Workshop sponsored by the Governor's Office and held in Columbia on Apr. 13. Their presentation covered research in housing problems which is ongoing at Clemson.

B. R. Skelton (Assoc Prof) addressed the annual meeting of the South Carolina School Boards Association in Columbia, Apr. 6. The title of his address was, "Evolving School Teacher-School Board Relationships."

ENTOMOLOGY AND ECONOMIC ZOOLOGY

T. R. Adkins, Jr. (Prof) was recently elected to a 5-year term on the Editorial Board of the Journal of the Georgia Entomological Society.

T. R. Adkins has been granted permission to attend and present an accepted paper on the biology and control of tabanids in Coastal South Carolina at the 14th International Congress of Entomology in Canberra, Australia, Aug. 12-31.

ENVIRONMENTAL SYSTEMS ENGINEERING

J. F. Andrews (Prof and Hd) presented an invited seminar on "Dynamics and Control of Anaerobic Digestion" at Georgia Tech, Apr. 26.

A. R. Abernathy (Assoc Prof) presented a paper entitled, "The Significance of Trace Elements and Organic Compounds in Water" at the 43rd Annual Meeting of the Southeastern Section of the American Water Works Association held in Macon, Ga., Apr. 30 - May 3.

FOOD SCIENCE

J. H. Mitchell, Jr. (Prof) presented an invited paper on "The Role of the Universities in Military Feeding" at the 26th annual meeting of the Research and Development Associates for Military Food and Packaging Systems, Inc., held in Chicago, Ill., Apr. 19.

FOOD SCIENCE (Continued)

The following papers were presented at the 45th annual meeting of the S. C. Academy of Science in Columbia, Mar. 24-25: R. G. Bursey (Grad Stu) and R. F. Borgman (Assoc Prof), "The Effect of Maternal Ethanol Consumption on Offspring Learning."

Lynn B. Bailey (Grad Stu) and D. M. Henricks (Assoc Prof), "Endocrine Status and Embryo Survival in Protein Deprived Pregnant Rats."

INTERDISCIPLINARY STUDIES

J. J. Klawitter (Asst Prof) has received a \$16,000 Research Initiation Grant from the National Science Foundation to study the use of porous ceramic materials as a means of functionally attaching implant devices to the skeletal system.

MATHEMATICAL SCIENCES

Khursheed Alam (Assoc Prof) and K. T. Wallenius (Assoc Prof) presented papers "Peak Rate of Occurrence of a Poisson Process," and "Identity Maintenance Tracking," respectively, at the spring meeting of the American Statistical Association at V.P.I. in Blacksburg, Va., Apr. 16-18. Dr. Wallenius also served as a discussant of a paper on "Statistics in the Social Sciences."

PHYSICS

H. W. Graben (Prof) and R. H. Fowler (former Grad Stu) published an article entitled "Three-Body Dipole and Quadrupole Interactions in Neon and Argon" in the March 1 issue of the Journal of Chemical Physics.

H. W. Graben presented a colloquium entitled "Nonadditivity of Intermolecular Forces" in the Physics Dept. of Georgia State University on Apr. 17.

H. W. Graben will attend an institute on "Frontiers in High Energy Physics" to be held at Northern Illinois University, June 5-16.

J. R. Ray (Assoc Prof) had a publication entitled "Noether's Theory in Classical Mechanics" in the March issue of American Journal of Physics.

F. J. Keller (Assoc Prof) and R. C. Turner (Asst Prof) presented a paper at the March meeting of the American Physical Society in Atlantic City, N.J., entitled "An ESR Study of Thermal Degradation of Poly(ethylene Terephthalate)." A. L. Laskar (Assoc Prof) and R. W. Blackwell (former Grad Stu) also presented a paper entitled, "Diffusion of SR Ion in SR-doped AgCl."

POULTRY SCIENCE

C. D. Humphrey (Grad Res Asst) and D. E. Turk (Assoc Prof) presented a paper entitled "Parasitic Infection and Intestinal Ultrastructure" at the annual meeting of the Federation of American Societies for Experimental Biology in Atlantic City, N. J., Apr. 14.

D. E. Turk presented a paper entitled, "Intestinal Parasitism and Calcium Absorption" at the annual meeting of the American Institute of Nutrition, Apr. 12 in Atlantic City, N. J.

SOCIAL SCIENCES

The following participated in the meetings of the South Carolina Political Science Association in Columbia, Apr. 15: H. E. Albert (Asst Prof) presented "A Symposium as Catalyst in a Public-Private Sector Conflict." R. A. Rimkus (Asst Prof) presented "The Informational Properties of a Crisis Decision Process: An Analytic Study of the Quarantine Decision."

M. W. Slann (Asst Prof) was re-elected vice president of the S. C. Political Science Association.

G. S. Rent (Asst Prof) with C. S. Rent presented: "Changing Homogeneity of Urban Residential Areas by Occupational Prestige," at the Alpha Kappa Delta Sociological Research Symposium, Virginia Commonwealth University, Richmond, Apr. 22.

J. L. Arbena (Asst Prof) presided at a session on Cuba at the 19th annual Southeastern Conference on Latin American Studies at Chapel Hill, N. C., Apr. 28.

W. C. Capel (Asst Prof) and Bernard Caffrey (Assoc Prof) presented the Sociological and Psychological aspects of stress at a symposium on stress held at the Anderson Memorial Hospital Auditorium on Apr. 18th and 25th. The symposium was sponsored by the Erskine College Dept. of Behavioral Sciences.

Bernard Caffrey presented a paper entitled "Social Attitude patterns of students representing different colleges of a University" at the April meetings of the Southeastern Psychological Association in Atlanta, Ga. Dr. Caffrey and Janie P. Jones (Stu) presented a paper "Scholastic Aptitude Test Scores and other variables related to the GPRs of Black and White Students at a Southern University," and Dr. Caffrey and Susan W. Lile (Stu) also presented a paper entitled, "Scientific Attitudes of Students as a function of Major Curriculum" at this meeting.

Thomas G. Titus (Asst Prof) presented a paper "The effects of temporal segmenting during list presentation on the serial positive curve" at the April meeting of the Southeastern Psychological Association in Atlanta.

TEXTILE DEPARTMENT

H. M. El-Behery (Assoc Prof) presented a paper entitled, "Study of Mechanical and Physical Properties of Commercially Available Adhesively and Mechanically Bonded Nonwoven Fabrics" at the American Chemical Society's national meeting in Boston, Mass., Apr. 10-14.

C. W. Roberts (Assoc Prof) attended the American Chemical Society meeting on Apr. 11. He chaired several symposia and the council committee on Technical Activities. He was also appointed to an Ad Hoc Committee to study the restructuring of the American Chemical Society.

A paper, entitled, "Thermal Analysis of Carbohydrates in the Presence of Selected Transition Metal Salts," by W. A. Archie (Stu), J. T. Gill (Post-Doctoral Fellow) and R. H. Barker (Assoc Prof) was presented by Mr. Archie in symposium on thermal analysis of carbohydrates, American Chemical Society meeting, Boston, Mass., Apr. 11.

Donald W. Lyons (Assoc Prof) presented a paper at the annual meeting of the Southeastern Electric Power Exchange in Biloxi, Miss. The title of the paper was "The Impact of the Occupational Safety and Health Act on Central Power Stations Operations."

D. W. Lyons was a guest speaker at the annual conference of the South Carolina Association of Counties. He discussed South Carolina's new safety and health regulations and how these regulations apply to county government operations.

ZOOLOGY

William Bachop (Asst Prof) presented a paper on Robertsonian chromosomal polymorphism in fish embryos at the Southeastern Developmental Biology Conference held Apr. 21st and 22nd at the University of Florida, Gainesville under the auspices of the Society for Developmental Biology and the American Society of Zoologists.

PROCEDURES FOR SUBMITTING NEWSLETTER MATERIAL

All Calendar items of campus events (speakers, films, meetings, seminars, sporting events, etc.) should be submitted by written memorandum directly to the Office of Public Relations, Trustee House. Information and news items from the Office of the President, Vice President for Business and Finance, Vice President for Executive Affairs, Vice President for Student Affairs and the Vice President for Development should be submitted by written memorandum to the Office of Public Relations, Trustee House. Information and news items from all areas under the Vice President for Academic Affairs should be submitted by written memorandum to Dr. Claud B. Green, Room 28, Tillman Hall.

The following deadlines prevail: Items to appear in the Newsletter published the 1st of each month must be submitted by the 20th of the previous month; items to appear in the Newsletter published the 15th of each month must be submitted by the 5th of each month.

CLEMSON

NEWSLETTER

INFORMATION FOR THE STAFF OF CLEMSON UNIVERSITY

JUN 3 1 1972

Vol. 11 No. 20

June 1, 1972

DR. SKOVE APPOINTED ALUMNI PROFESSOR

Dr. Malcolm J. Skove, a former Fulbright lecturer, has been named Alumni Professor of Physics by Clemson President Robert C. Edwards, effective July 1. Alumni professorships are awarded on the basis of recommendations by academic deans to recognize excellence in teaching. Recipients receive a salary supplement of \$2,000 a year.

The program is financed by the Clemson Alumni Association through its Alumni Loyalty Fund. Only faculty members who do not have administrative duties are eligible for the award, first given in 1962.

Clemson currently has nine Alumni Professorships. Skove is the eleventh professor to hold the honor.

In announcing the appointment, President Edwards said Skove's "dedication to teaching and the welfare of his students eminently qualifies him for this recognition.

"I have always considered the Alumni Professorship program as one of the most worthwhile activities of the Alumni Association because it helps the university reward outstanding teachers in a way that could not otherwise be done."

OLD EDUCATION BUILDING RENAMED KINARD ANNEX

In order to prevent confusion, the Executive Officers have decided that the "Old Education Building"-- which will house faculty of the College of Physical, Mathematical and Biological Sciences -- will be known as Kinard Annex.

ALUMNI REUNION WEEKEND IS JUNE 8, 9, 10 and 11

Another big reunion weekend is scheduled for Thursday, Friday, Saturday and Sunday --- June 8, 9, 10, and 11.

The annual Clemson Alumni Banquet this year will be held in Harcombe Commons on Saturday evening, June 10 at 6:30 o'clock. It is at this occasion that five alumni receive the Association's highest award --- the Distinguished Service Award --- for 1972.

ALUMNI REUNION WEEKEND IS JUNE 8, 9, 10 and 11 Continued

Tickets are now available at the Alumni Office and are \$5.00 per person. If you plan to attend the banquet pick up your ticket now and avoid the lines during reunion weekend.

The General Assembly of Alumni will convene at 2:30 p.m. on Saturday, June 10 in Daniel Hall Theatre. The program will include remarks from University President Robert C. Edwards and an athletic report from Athletic Director Bill McLellan. National Alumni President Thomas C. Breazeale of Knoxville, Tennessee will preside. The ladies meanwhile will be treated to a fashion showing of the latest in women's apparel at the Clemson House.

SLIDE PRESENTATION AVAILABLE

"Clemson: Challenge and Change," a new 10-minute slide/tape presentation produced by the University Communications Center, is now available for use. The program utilizes 70 color slides with pre-taped narration, guitar music and slide-change tones to give an overview of Clemson University. It should be especially useful as an introductory piece for faculty-staff serving as guest speakers for off-campus organizations or student groups.

Faculty, staff and students interested in using the program should make reservations through the University Communications Center, 85 Plant and Animal Building (656-3204 or -3205).

FACULTY MEMBERS GET SUMMER APPOINTMENTS

Three University faculty members have received appointments to participate in research this summer at laboratories of the U.S. Atomic Energy Commission and the National Bureau of Standards. Representing Clemson are W. Robert Boland, Department of Mathematics; Burt V. Bronk, Department of Biology; and Stephen Melsheimer, Department of Chemical Engineering. They are among 44 other science and engineering faculty members from 43 colleges and universities in 23 states and Puerto Rico. The program is administered by Oak Ridge Associated Universities on behalf of the AEC's Division of Nuclear Education and Training.

COMMUNICATIONS CENTER

Louie E. Dean Sr. (photographer) has been named to the Hall of Fame of the Georgia Professional Photographers Association. He is the sole inductee for 1971. Dean, a Greenville native and resident of Clarkesville, Ga., was elected to the honorary group because of "outstanding contributions to the profession" throughout his 32-year career in photography.

PHYSICAL PLANT

James M. Hanna of Taylors, formerly assistant chief engineer with Simons-Eastern Co., Greenville, has joined the Physical Plant Division of Clemson University as plant engineer. Hanna is a 1953 Clemson graduate in mechanical engineering and is a registered professional engineer in both Carolinas.

In another staff change, Claude W. Rothell Jr. of Seneca has been promoted from foreman of plumbing construction to supervisor of preventative maintenance. Rothell attended Seneca High School and was associated with Abney Mills at Newry before joining the Physical Plant Division in 1965.

MINUTES OF THE MEETING OF THE FACULTY SENATE, APRIL 11, 1972

The meeting was called to order at 4:17 p.m. by President Sawyer. The minutes of the March meeting were approved as circulated. President Sawyer introduced newly elected Senators and announced that a committee, consisting of one member from each college, had been appointed as requested by the Senate to support legislative action on an alternative retirement plan for university teachers. She further announced that Vice President M. A. Wilson and his staff had held a series of meetings following the Senate's request in the March meeting for improved communications; Vice President Wilson had assured the Senate of his concern for the same goals and the support which he and all his staff pledge to all University programs--academic, research, and extension. Vice President Wilson further assured the Senate that he and his staff would continue to take every opportunity to improve communications concerning policy and procedural changes affecting faculty and their work.

The only item of old business was Senate approval of a deletion from the last paragraph of the section on Annual Leave (Vacation) in the Faculty Manual to bring the section into line with the Board of Trustees recent action. A motion and second to delete the phrase

"and provided, further, that if payment to an employee for the total value of terminal leave in one fiscal year would result in total compensation in excess of the amount budgeted for him for that fiscal year, payment of the excess amount shall be deferred until the next fiscal year."

was approved unanimously.

As the first item of new business, the Senate considered, as requested, Student Government Bill No. B-72-36. The Bill reads as follows:

Add new paragraph 4 to "Scholastic Regulations, Minimum Requirements for Continuing Enrollment" (p. 119) to read:

A student re-admitted under the above provision shall have at the time of his re-admission, the following options concerning credit hours attempted at Clemson. He may choose to keep all credit hours attempted, or he may choose to count for credit only those credit hours he has passed with a C or better. In the former case, the student may keep, without repeating, any D's made, but at the same time, keeping his old grade-point ratio. In the latter case, a student will be required to repeat all courses in which he received either a D or F, and his new grade-point ratio will be determined only on the courses taken after his readmission.

MINUTES OF THE MEETING OF THE FACULTY SENATE, APRIL 11, 1972 (Continued)

Professor V. S. Hodges moved to recommend to Vice President Walter Cox acceptance of the resolution with the addition of a stipulation that students selecting the second option should have all previously obtained grades of C or higher recorded as C. The motion was seconded. A substitute motion was introduced by Professor J. D. Fulton to refer the bill to the Admissions and Scholarship Committee of the 1972-73 Senate for their consideration. The substitute motion was seconded, accepted and passed unanimously.

A resolution was introduced expressing faculty concern for Clemson's public image, and calling attention to the one sided picture of the University presented by the full-page ad and accompanying feature story, appearing in the "Educational Supplement" of the Greenville News on Sunday, March 26, both of which dealt entirely with Clemson's desire to sell 20,000 season football tickets. It was the prevailing sentiment of the Senate that in presenting Clemson to the general public, care should be taken to insure a balanced picture with emphasis on education, research, and extension programs, to tell the whole story of the University and its mission.

Some Senators had consulted Clemson's public relations staff and discovered that additional news stories had been submitted to the "Educational Supplement" which would have presented a fuller picture, but that selection of material finally printed and the space given it was a decision of the newspaper, and out of the control of the University's staff. Further, University policy precludes the spending of state controlled funds for advertising; the ad which appeared was bought and paid for by the Athletic Department from their independent funds, and there was no way in which another, counter-balancing ad, could have been purchased by the University.

Despite the Senate's concern that Clemson be presented to the public as more than just a "football college," then, the Senate voted the resolution down, since it had no wish to appear to condemn the honest and increasingly successful efforts of University publicity and public relations staff to present all of Clemson's many-sided contributions to the state.

The Senate has been asked for an expression of opinion on a proposed Student Bill of Rights previously distributed to Senators. Professor W. E. Castro moved, seconded by Professor W. F. Steirer, to recommend approval of the Student Bill of Rights exclusive of the following items: deletion of the section under Bill of Rights and Responsibilities which reads:

"Responsibilities set forth certain privileges and obligations with which students are endowed in various phases of university life. In the classroom free discussion and expression are encouraged. Information contained in student records shall be kept confidential, and no political, religious,

MINUTES OF THE MEETING OF THE FACULTY SENATE, APRIL 11, 1972 (Continued)

or moral beliefs should be recorded in these records. The University should be open to all students regardless of race, sex, religion, creed, or national origin. Students should be allowed to hear persons of their choosing. The student press should be free from censorship. This Bill of Rights and Responsibilities also provides for redress of grievance";

deletion of the second sentence in item VII C which reads:

"Such advisors do not have the authority to control the policies of student organizations";

deletion of Item VIII D which reads:

"Dormitory students are to have the right to decide upon any dormitory regulations pending approval of the Student Senate and consistent with established University guidelines. All students must comply";

clarification of items VI A and IX B which read respectively:

"A. Students have the right to trial by peers in matters which will be decided by the University," and

"B. The student has the right to petition the government for redress of grievance";

and substitution of the word "invite" for the word "choose" in item VII C. The motion passed. The Senate expressed endorsement of the principle of a Student Bill of Rights with the notation that any right requires certain corresponding responsibilities.

Professor J. D. Fulton called attention to an informational report containing recommendations of an ad hoc committee of the Athletic Council which considered faculty seating and ticket priorities at athletic events. Following discussion of the recommendations in that report, Professor Fulton moved, seconded by Professor Hodges, that the item be passed to the Welfare Committee of the 1972-73 Senate for further consideration. The motion passed unanimously.

The final item of new business was election of officers of the 1972-73 Senate. The slate for the office of President as presented by the Advisory Committee was: E. B. Rogers; J. C. Fanning. E. B. Rogers was elected. The slate for the office of Vice-President was: N. D. Camper; J. D. Fulton. J. D. Fulton was elected. The slate for the office of Secretary was: B. J. Skelton, W. F. Steirer. B. J. Skelton was elected.

Nominations were then put forward for membership on the Advisory Committee for 1972-73. One person was nominated from each college. Those elected by

MINUTES OF THE MEETING OF THE FACULTY SENATE, APRIL 11, 1972 (Continued)

acclamation were: T. E. Skelton for Agricultural Sciences; V.S. Hodges for Architecture; W. E. West for Education; W. E. Castro for Engineering; B. M. Cool for Forest and Recreation Resources; E. A. Vaughn for Industrial Management and Textile Science; W. F. Steirer for Liberal Arts; S. Sullivan for Library; R. A. Godbout for Nursing; and J. C. Fanning for Physical, Mathematical, and Biological Sciences.

Professor V. S. Hodges proposed a vote of thanks for the outstanding work done by retiring Senate President, Corinne Sawyer. The Senate expressed approval in the form of enthusiastic applause. President Sawyer pledged her continued support of the Senate and its work.

The meeting was adjourned at 5:40 p.m.

Absent from the meeting were: A. R. Abernathy; N. R. Bauld; B. M. Cool.

MINUTES OF THE MEETING OF THE UNIVERSITY LIBRARY COMMITTEE, APR. 27, 1972

Present: M. W. Jutras (Chairman), William E. Bachop, R. J. Calhoun, Elizabeth Galloway, David Rowe (Student Senate), R. E. Schoenike, D. B. Stafford, Patrick R. Watts (Student Representative), J. W. G. Gourlay (Secretary).

Minutes of the meeting of April 4 were approved.

Chairman concurred with remarks in letter sent by Dean Hurst to thank student members of the Library Committee for their participation during the year.

Chairman thanked members of the Library Committee for their work and co-operation during the year.

Mr. Gourlay reported that Miss Sophia Sullivan had been named as chairman of a committee of librarians to compare status of professional librarians with nationally recommended standards of the American Library Association.

Library Security - The main topic of the meeting was a point by point discussion of the recommendations made in the Report of the Subcommittee on Library Security. The full report of this study is available in the office of the Director of the Library.

A summary of the adopted recommendations follows:

1. That the library select several L. C. classifications from which there is evidence that considerable losses have occurred and carry out a complete inventory of these classifications annually for three years.

MINUTES OF UNIVERSITY LIBRARY COMMITTEE MEETING, APR. 27, 1972 (continued)

2. That complete records continue to be kept of periodicals that need to be replaced, and that a list of such periodicals be compiled semi-annually and reported to the library committee at its October and April meetings.
3. That complete records also be compiled of all missing books and that these be reported annually to the library committee.
4. That supplies of (preferably colored) 'books reported missing' cards, and 'missing articles' cards be placed in the counter recesses of all card catalog tables so that they are readily available to users.
5. That, provided funds can be made available, another copier with a meter be made available on the second floor for both staff and student use when copier on main floor is receiving heavy use.
6. That the Chairman appoint an Ad Hoc Committee to work with members of the library staff in drawing up Guidelines for the Reserve Book Collection.
7. That additional wage money be requested to provide for additional help at the checkout desk when the three checkout ladies presently employed are sick or on annual leave so that the checkout desk can be manned as continuously as possible.
8. That checkers be supplied with library security violation forms to be filled out whenever a violation occurs.
9. That the presently easily-mounted barrier in the foyer be replaced by one that is taller and more permanent.
10. That the library put at the exit desk of the building a copy in large print, and abbreviated to include only essentials, of the South Carolina law relating to library security (Sections 16-372 to 16-376, S. C. Statutes, (962).
11. That the Library Committee recommend that the University Administration investigate a checkout policy for persons leaving the University, this policy to include library clearance.
12. That the Clemson University Student Handbook and Faculty Manual contain a summary section on library policies with respect to books due, fines, and lost books calling attention to the responsibility of each person for making good any book charged out to him that is not returned in good condition.

MINUTES OF UNIVERSITY LIBRARY COMMITTEE MEETING, APR. 27, 1972 (continued)

13. That the library investigate the possibility of obtaining a unique book-due stamp.
14. That all persons using the basement be required to sign a check-in and check-out sheet, such as is used in the South Carolina room collections, and that check-out must be made in the presence of a librarian.
15. That the library staff be instructed that in the course of their regular duties to be on the alert for illegal or unusual activities and to call a security officer when necessary.
16. That faculty members in their classes be encouraged to stress the importance of library resources and security.
17. That an investigation be made of prominent, positive, thought provoking signs that would be deterrent to theft.
18. That the library committee consider a permanent standing subcommittee on Library Security, to be composed of two persons whose terms on the library committee are not concurrent. The chairman of the library committee would make the appointments after the September meeting. The term of appointment would ordinarily be for the full time that the subcommittee members remain on the Library Committee.

That the duties of the subcommittee would be to make continuing study of the needs of security at the Clemson Library to assess the current situation and make recommendations as the situation demands.

The committee voted its unanimous appreciation for the investigation that Dr. Schoenike had made on library security.

The Library Committee wishes to remind the faculty of the obligation to return or renew books as stated in Library Rules Governing Fines and Delinquent Borrowers:

- (b) Staff and faculty borrowers are granted the privilege of indefinite loan. Indefinite loan is for the purpose of the personal research to whom the indefinite loan privilege is extended. Once a year, preferably in April, staff and faculty borrowers will return all library books in their possession. Rules 3b and 3e on lost and damaged books apply to staff and faculty as well as students. The librarian will advise staff and faculty members when they are remiss. Delinquencies that are unresolved will be reported to respective department heads or superiors for further action.

The meeting adjourned at 6:00 p.m.

SCHOLARSHIPS AND AWARDS COMMITTEE MEETING

1. The eighth meeting of the Scholarships and Awards Committee was held in Room 205 Strode Tower at 2:00 P.M., Wednesday, May 3, 1972. Present: Norman Olsen, Jr. (Chairman), Susan Rockwell, N. R. Bauld, P. A. Steiner, R. H. Hunter, J. T. Lazar, J. R. Warner, H. E. Morgan, Jr., W.C. Whitten, A. M. Bloss, Susan Delony, K. N. Vickery.
2. The chairman announced that Ellen Jean Graef, Poynette, Wisconsin, and Robert William Aldred, Statesboro, Georgia, have accepted R. F. Poole Alumni Scholarships for 1972-73.
3. The committee selected Joseph Fletcher Anderson, Jr., political science major from Edgefield, as its nominee for the 1972 Norris Medal. Mr. Anderson, recipient of this year's Algernon Sydney Sullivan Award, will graduate with a cumulative grade-point ratio of 3.95.
4. Dean Vickery reported that Mrs. Annie Bailes Brown, graduating with a cumulative grade-point ratio of 4.00, is the recipient of the 1972 Faculty Scholarship Award.
5. The chairman received the committee's approval to appoint Dean Green and Colonel Bloss as a committee to review and confirm the recommendations of academic deans for scholarship aid to incoming freshmen and for other such matters as may arise during the summer.
6. The meeting was adjourned at 2:45 P.M.

COLLEGE OF AGRICULTURAL SCIENCES

The following have been appointed as affiliate marine scientists with the South Carolina Marine Resources Center:

Dr. T. L. Senn, Professor of Horticulture and Head of Horticulture Dept.
Dr. W. I. Golden, State Leader, Extension Agricultural Programs and
Professor of Agricultural Economics and Rural Sociology
Dr. J. C. Hite, Associate Professor of Agricultural Economics and Rural
Sociology.

CERAMIC ENGINEERING

C. C. Fain (Assoc Prof), W. F. Brandt (Grad Stu), S. F. Hulbert, and G. C. Robinson (Prof and Hd, Ceramic Eng) presented a paper entitled "Surface Stabilization of Sodium Silicate Glass by Ion Exchange and Chemical Vapor Deposition" at the 74th annual meeting of the American Ceramic Society on May 10 in Washington, D. C.

C. C. Fain, J. A. Carroll, Jr. (Grad Stu) and S. F. Hulbert presented a paper entitled "Surface Stabilization of a Soluble Glass by Alkali Ion Exchange Processes" at the 74th annual meeting of the American Ceramic Society on May 10 in Washington, D. C.

S. F. Hulbert, C. N. Wilson (Ohio State), and J. E. Lemons (University of Alabama) presented a paper entitled, "Mechanical Strength Testing of Highly Porous Calcium Aluminate Ceramics" at the 74th annual meeting of the American Ceramic Society on May 9 in Washington, D.C.

CHEMICAL ENGINEERING

D. F. Bruley (Prof) presented a seminar at the State University of New York at Buffalo, "Systems Studies in the Microcirculation," Apr. 27.

D. F. Bruley has been awarded \$25,431 by NIH for "Mathematical Studies of Oxygen Diffusion in the Brain."

D. F. Bruley was asked to serve on the CACHE (Computer Applications in Chemical Engineering - AIChE) subcommittee "Dynamic Systems and Control," starting May 23.

F. C. Alley (Prof) presented a talk entitled, "Air Pollution Research," before the Carolinas Air Pollution Control Associated, Apr. 13. in Charlotte. N. C.

C. E. Littlejohn (Prof and Hd) has been appointed chairman of the Publications Board for the Journal of Chemical Engineering Education.

S. S. Melsheimer (Asst Prof) has been appointed an AEC-ORAU Faculty Research Participant at the Savannah River laboratories this summer.

S. S. Melsheimer completed a short course on minicomputer programming, Apr. 24-28 at the Data General Corporation plant in Marlboro, Mass.

COLLEGE OF ENGINEERING - Continuing Education

An "Effective Teaching Workshop" was held on May 8-10 at the Kingwood Country Club at Clayton, Ga. The workshop was sponsored by the Effective Teaching Committee of the College of Engineering. The workshop director was Dr. Edwin B. Kurtz, Chairman of the Biology Dept., Kansas State Teachers College. Workshop associates were: Dr. Alan J. Brainard (Assoc Prof Chem & Petr Engr), University of Pittsburgh; Dr. Dave Husband (Asst Prof of Biol) University of South Carolina; and Dr. Joe F. Allen (Assoc Prof of Chem & Geol), Clemson University. The College of Engineering Planning committee for this workshop included:

Dr. J. C. Hester, Chairman, Dr. William F. Beckwith, Professor Carl M. McHugh, Dr. John H. Austin, Dr. Walter E. Castro, and Dr. Byron K. Webb.

Nineteen academic departments and two academic administrative offices of Clemson University and one Federal Agency had representatives at the workshop.

COLLEGE OF ENGINEERING

S. F. Hulbert (Assoc Dean) participated in the annual meeting of the South Carolina Regional Medical Program on Apr. 28-30 at Myrtle Beach.

COLLEGE OF NURSING

Geraldine Labecki (Dean) has been elected Vice-Chairman of the Executive Committee of the State Board of Health for South Carolina. Dean Labecki was appointed to the Executive Committee for a seven year term by Governor McNair in Aug., 1970.

ELECTRICAL AND COMPUTER ENGINEERING

A paper by J. C. Martin (Prof), Irwin Tolins (Assoc Prof) and Dennis Mauney (Grad Stu), entitled "An Analytic System for Commodity Purchasing," was presented by Professor Martin at the Fourth Southeastern Symposium on Systems Theory, Lexington, Ky., Apr. 3-4.

Irwin Tolins (Assoc Prof) has been selected as a participant in the Summer Institute for College Teachers in the Life Sciences and Engineering to be held at Utah State University, Logan, Utah, June 19 - Aug. 11. The topic of the Summer Institute is "Systems Approach to the Life Sciences." It is supported by the National Science Foundation.

ENVIRONMENTAL SYSTEMS ENGINEERING

R. L. Reynolds and J. H. Austin (Prof) presented a paper entitled, "A Role of Instructional Technology in the Solution to Environmental Pollution," at the 18th annual meeting of the Institute of Environmental Sciences in New York City, May 3.

T. M. Keinath (Assoc Prof) received approval of a research proposal entitled, "Reclamation of Polyvinyl Alcohol from Textile Desizing Wastewaters" from E. I. duPont de Nemours and Company. The contract is to extend over a two-year period beginning May 15, 1972 and has a budget of \$19,856.

T. M. Keinath and W. M. Kachel (CPT, Medical Service Corps, U.S. Army) presented a paper entitled, "Reclamation of Textile Printing Wastewaters for Direct Recycle" at the 27th annual Purdue Industrial Wastes Conference held at Lafayette, Ind., May 2-4.

J. F. Andrews (Prof and Hd) presented an invited seminar on "Dynamics and Control of Biological Processes" at the University of Connecticut, May 8.

FOOD SCIENCE

J. C. Acton (Asst Prof) had the following two research papers published: "Effect of meat particle size on extractable protein, cooking loss and binding strength in chicken loaves," J. Food Sci. 37:240-243. "Effect of heat processing on extractability of salt-soluble protein, tissue binding strength and cooking loss in poultry meat loaves. J. F.. Sci. 37:244-246.

D. M. Henricks (Assoc Prof), H. D. Guthrie (Grad Stu) and D. L. Handlin (Asst Prof, An Sci) had published a paper entitled "Plasma estrogen, progesterone and LH levels during estrous cycle in pigs" in a recent issue of Biology of Reproduction.

M. G. Johnson (Asst Prof) participated in the Southern Regional Food Safety and Protection Task Force meeting Apr. 18-20 at Richard B. Russell Research Center in Athens, Ga. Dr. Johnson was asked to serve as secretary for the Food Processing and Manufacturing section in preparing this Task Force report.

J. H. Mitchell, Jr. (Prof) attended the meeting of the Dixie Section of the Institute of Food Technologists in Atlanta, Apr. 21 and was installed as chairman of the Dixie Section for 1972-73.

J. H. Mitchell, Jr. attended the annual meeting in Chicago of the Research and Development Associates for Military Food and Packaging Systems, Inc., Apr. 17-19 and presented an invited paper on "The Role of the University in Military Feeding."

GEOLOGY

The National Science Foundation has granted an additional \$20,100 for renewed support of the project entitled, "Analysis of the Structural, Petrologic and Stratigraphic Interrelationships Between the Inner Piedmont, Kings Mountain, Charlotte and Carolina Slate Belts in South Carolina," under the direction of Villard S. Griffin, Jr. (Assoc Prof).

MATHEMATICAL SCIENCES

James A. Reneke (Assoc Prof) attended a Symposium in General Analysis at Arkansas State University, Jonesboro, Ark., on Apr. 28-29 and presented an invited talk on "Stieltjes Integral Equations in Partially Ordered Sets."

J. A. Reneke will be associated with the University of Houston as a Visiting Associate Professor of Mathematics during his sabbatical leave in the 1972-73 academic year.

R. E. Fennell (Asst Prof) and T. G. Proctor (Assoc Prof) recently published "On Asymptotic Behavior of Perturbed Nonlinear Systems," in Proc. Amer. Math. Soc., Vol. 31, No. 2 (1972).

W. Robert Boland (Assoc Prof) has been selected for the Faculty Research Participation Program at the Oak Ridge National Laboratory. The appointment, which runs from May 15 to Aug. 15, will enable Dr. Boland to continue his research in modern numerical analysis and applied mathematics.

PHYSICS

M. D. Sherrill (Assoc Prof) and J. E. Payne (Asst Prof) had an article entitled, "Current-voltage characteristics of Type-II Superconductors" published in Feb. issue of Physics Letters.

D. P. Miller (Assoc Prof) and Robert A. Pittman (Sm. R.D., ARS, USDA) presented a paper at the 12th Cotton Utilization Research Conference, May 8-10, in New Orleans, La., entitled "Proton Mobilities of Liquids Sorbed on Cotton Cellulose."

MICROBIOLOGY

The following papers were presented by members of the Microbiology Dept. at the 72nd annual meeting of the American Society for Microbiology, held in Philadelphia, Apr. 23-28:

"Application of a Rapid Turbidimetric Assay to Pentose Transport by Bacterial Protoplasts," by Ann W. Baxter (Assoc Prof) and R. N. Moore (Grad Res Asst).

"Considerations of Bacterial Populations in a Pesticide - Contaminated Aquatic Ecosystem," by R. K. Guthrie (Prof and Assoc Dean) and R. N. Ferebee (Grad Res Asst).

"Pure Culture Studies on the Interaction of Ioxynil with Erwinia carotovora," by J. C. Hsu (Grad Res Asst) and N. D. Camper (Assoc Prof, Plant Path and Physiol).

"Occurrence of Bacteriophages and their Hosts in Bovine Rumen Contents," by G. K. Reubish (Grad Stu) and M. J. B. Paynter (Assoc Prof and Hd).

M. J. B. Paynter presented an invited seminar entitled "The Ecology of Bacterial Viruses," at South Carolina State College, Orangeburg, on Apr. 10.

A seminar entitled, "Methanogenic Bacteria and Methanogenesis" was presented by M. J. B. Paynter at the "Animal Health and Nutrition Research Laboratories" of Smith, Kline and French, Philadelphia on Apr. 28.

SOCIAL SCIENCES

C. W. Bolen (Prof) was elected vice president of the South Carolina Historical Association at its annual meeting in Columbia, Apr. 8.

These papers were presented at the meeting of the Southern Sociological Society, New Orleans, La., Apr. 6-8:

D. H. Smith (Inst) and R. A. Rimkus (Asst Prof), "The Use of Simulation Games for Teaching Sociology in High School: Proposals and Findings."

G. S. Rent (Asst Prof) was the critic for a session on Human Ecology.

J. M. Turner (Inst) presented, "Some Effects of Food Stamp Use on the Shopping Habits of the Poor."

ZOOLOGY

William Bachop (Asst Prof) presented a talk on "Histochemistry" at Presbyterian College, Clinton, May 5, as part of the visiting speaker program of the South Carolina Biologists Association.

CLEMSON UNIVERSITY AT SUMTER

William T. Walker III (Asst Prof of History) has received a fellowship from the Foundation for Economic Education to attend a summer seminar at the Foundation's headquarters in Irvington-on-Hudson, New York. Mr. Walker will study political economy.

Joseph P. Cameron (Asst Prof of Math) has been designated as Assistant to the Director, effective June 1, 1972.

CALENDAR OF CAMPUS EVENTS

June 5-	Mon.-	Tiger Basketball Camp.
July 1	Sat.	
June 5-	Mon.-	FFA Convention - campus.
June 8	Thurs.	
June 9-	Fri.-	Alumni Reunion Weekend.
June 11	Sun.	
June 9	Fri.	Alumni National Council and Clemson Foundation - meet at Clemson House.
June 9-	Fri.-	Outdoor Track USTFF.
June 10	Sat.	
June 10	Sat.	Alumni Class Meetings; General Assembly; Alumni Banquet.
June 15-	Thurs.-	Outdoor Track - NCAA Meet at Eugene, Oregon.
June 17	Sat.	

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CLEMSON NEWSLETTER

INFORMATION FOR THE STAFF OF CLEMSON UNIVERSITY

Vol. 11 No. 21

June 15, 1972

BOSTIC NAMED WHITE HOUSE FELLOW

Dr. James E. Bostic Jr., 24-year-old South Carolina native who received his doctoral degree from Clemson in May, has been appointed a 1972-73 White House Fellow. He is one of 17 young men to be selected for the prestigious Fellowship from an initial field of 1,509 applicants nationwide. He is the youngest member of the elite group and only the second South Carolinian to receive a White House Fellowship since the program was created in 1964.

The appointments were announced after the 33 national finalists met in Washington, D.C., for the final round of interviews in the competition. The President's Commission on White House Fellows conducted three separate individual interviews with each finalist.

Bostic will move to Washington in late August and begin one year of service with the federal government Sept. 1. The job assignment is the heart of the program because it enables Fellows to come away with a sense of what participation in government policy-making really means.

Besides daily tasks, Fellows participate in educational activities revolving around the government's processes, personalities, and problems. They learn, at first-hand, the major issues faced by their government and the challenges of finding and implementing solutions.

14 FACULTY NAMED OUTSTANDING EDUCATORS

Fourteen University faculty members have been named to the 1972 list of Outstanding Educators of America. Named are Dr. Morris A. King, Head of the Elementary and Secondary Education Department; Dr. Earl T. Carpenter, Associate Professor of Agricultural Education; Dr. Myrton A. Packer, Coordinator of the Office of Educational Services; Dr. John H. Austin, Professor of Environmental Systems Engineering.

Also Dr. Duane F. Bruley, Associate Professor of Chemical Engineering; Prof. James L. Edwards, Assistant to the Dean, College of Engineering; Peter R. Lee, Associate Professor of Architecture; Dr. Victor Hurst, Vice President for Academic Affairs and Dean of the University; Douglas W. Bradbury, Alumni Professor of Machine Design; Dr. Richard J. Calhoun, Alumni Professor of English; Dr. Marvin A. Owings, Head of English Department; Dr. Joel V. Brawley Jr., Associate Professor of Mathematics; Dr. Harriet R. Holman, Associate Professor of English; and Dr. Gordon Gray, Associate Professor of Education.

An annual national awards program, Outstanding Educators of America recognizes distinguished men and women for exceptional service, achievement and leadership in education.

CERAMIC ENGINEERING

Ceramic Engineering faculty members and graduate students presented four papers at the annual American Ceramic Society Convention in Washington, D.C., May 7-10. The presentations were as follows:

H. H. Wilson (Prof) and H. G. Lefort (Assoc Prof) presented the paper, "Quantitative Studies of Catalytic Porcelain Enamel."

C. C. Fain (Assoc Prof), W. F. Brandt (Grad Stu), S. F. Hulbert (Assoc Dean) and G. C. Robinson (Prof), "Surface Stabilization of Sodium Silicate Glass by Ion Exchange and Chemical Vapor Deposition."

C. C. Fain, J. A. Carroll (Grad Stu), and S. F. Hulbert, "Surface Stabilization of Soluble Glass by Alkali Ion Exchange Process."

G. C. Robinson (Prof), "Predicting Manufacturing Behavior with Thermal Dilatometric Gravimetric Analyses."

G. C. Robinson presented a talk on "New Techniques in Masonry Construction" to the annual meeting of the Mississippi-Louisiana Brick and Tile Association in Biloxi, Miss., May 19-20. Professor Robinson also presented a talk on "Reactions in Mortars" to the annual meeting of the Southern Brick and Tile Association in Sea Island, Ga., May 22-23.

COLLEGE OF ARCHITECTURE

Harlan McClure (Dean) presided at the National Convention of Tau Sigma Delta in Houston, Texas on May 7. He is Grand Chapter Master of the Honorary Architecture and Fine Arts Fraternity. Professor Joseph L. Young is Grand Chapter Recorder and assisted in the presentation of medals to Dean Emeritus Emil Fisher (Kansas State University) and Oneil Ford, FAIA.

Dean McClure spoke to the Columbia, S. C. Rotary Club on June 12. The title of his paper was "The Education of Architects and Planners for Tomorrow's World."

Jack Clark (Assoc Prof) attended the national joint meeting of the American General Contractors Association and the Associate Schools of Construction held in Seattle, Wash. and presented a paper entitled, "Numerical Control for Contractors." Dr. Clark was also re-elected as a national director of the Associated Schools of Construction and was selected to represent a joint committee of these construction organizations in seeking federal funds for construction research.

COLLEGE OF EDUCATION

H. F. Landrith (Dean) served as a member of the Southern Association of Colleges and Schools visitation committee at Mississippi Valley State College, Itta Bena.

H. F. Landrith served as consultant to the North Greenville Junior College Board of Associates who are studying the role of the private two-year college in the 1970's.

COLLEGE OF ENGINEERING

Samuel F. Hulbert (Assoc Dean) has been appointed an Affiliate Marine Scientist of the South Carolina Marine Resources Center, Charleston. The appointment was made by Dr. James Timmerman, Director of the Marine Resources Center.

S. F. Hulbert published with C. W. Hall, Southwest Research Institute, S. N. Levine, State University of New York at Stony Brook, and F. A. Young, Medical University of South Carolina, Bioceramics - Engineering in Medicine, Intrascience Publishers, John Wiley & Sons, New York, pp. 1-484, 1972.

ECONOMICS

Frederick H. Reuter (Asst Prof) and Otto A. Davis of Carnegie-Mellon University, presented a paper entitled "A Simulation of Zoning Decisions in Pittsburgh," in the session on Regulation by Local Governments at the meeting of the American Society for Public Administration which was held in New York City, Mar. 21-25.

Frederick H. Reuter presented a paper entitled, "Externalities in Urban Property Markets: An Empirical Test of the Zoning Ordinance of Pittsburgh," at the annual meeting of the Public Choice Society held in Pittsburgh, Pa., May 3-6.

ELEMENTARY AND SECONDARY EDUCATION

William W. Pennscott (Assoc Prof) and Darine F. Brown (Indiana University) are co-authors of "Anxiety and Empathy in a Counseling and Guidance Institute" which appears in Counselor Education and Supervision, June 1972, Volume II, Number 4.

ENGINEERING MECHANICS

E. Harry Law (Asst Prof) will attend a NATO Advanced Study Institute on the subject of Theory and Practice of Systems Modelling and Identification. The Institute will be conducted in Toulouse, France from July 17-28.

ENGINEERING RESEARCH

P. J. Aragon (Post Doctoral Res Asst) and S. F. Hulbert (Associate Dean) recently had a paper entitled "Corrosion of Ti-6Al-4V in Simulated Body Fluids and Bovine Plasma," published in the Journal of Biomedical Materials Research, Vol. 6, pp. 155-164 (1972).

ENTOMOLOGY AND ECONOMIC ZOOLOGY

T. R. Adkins, Jr. (Prof) and Herbert M. Henry and Louise G. Henry (Grad Res Assts) visited the North Carolina University biting fly research station in Moorehead City, N. C., May 25-27.

C. A. Thomas, Jr. (Assoc Prof) has received a Grant-in-Aid of \$500.00 from Mobil Chemical Company for research studies on forage and legume insects.

ENVIRONMENTAL SYSTEMS ENGINEERING

T. M. Keinath (Assoc Prof) presented an invited paper entitled "The Future - New and Developing Methods Applicable to the Textile Industry" at a Workshop held in Columbia on June 6 and sponsored by the South Carolina Textile Manufacturers Association. The workshop was entitled "Textile Waste Disposal for Decision Makers."

LANGUAGES

Ed Arnold (Instr) attended the national workshop of chapter presidents of the American Association of Teachers of German at the University of North Carolina at Chapel Hill, May 26-29.

MATHEMATICAL SCIENCES

Paul T. Holmes (Assoc Prof) presented a talk entitled "Deceptive Statistics" at Savannah State College on May 3 and a talk entitled "Random Walk and Gambler's Ruin" at Armstrong State College, Savannah, Ga. on May 4.

TEXTILE DEPARTMENT

Harry Small (Grad Stu), John D. Hatcher (Asst Prof) and Donald W. Lyons (Assoc Prof) published a paper in the March issue of the Journal of Microwave Power. The title of the paper is "Microwave Drying of Latex Carpet Backing."

John Pendergrass (Grad Stu), John D. Hatcher, and Donald W. Lyons presented a paper at the International Microwave Power Conference which was held in Ottawa, Canada in May. The title of the paper was "Deposition of Finishes and Dyes in Materials Dried Using Microwave Heating."

Donald W. Lyons and John D. Hatcher presented several lectures in the week long course, "Fundamentals of Occupational Safety," sponsored by the National Safety Council in Columbia, May 15-19.

Edward A. Vaughn (Asst Prof) and Harry Arthur of Texas Tec are presently participating in a test project to learn basically what the cotton processors abroad like or dislike about American cottons. The project is broken into two areas, taking Dr. Vaughn to France and Mr. Arthur to Japan. They will be acting as spinning technologists and visiting mills to talk with cotton buyers and other spinning technologists to see if they can be of any technical assistance to them and hopefully, to promote further export of American cottons to these countries. These visits are sponsored by Cotton Council International in conjunction with the National Cotton Council, The Cotton, Inc., The International Institute for Cotton and the U.S.D.A. Foreign Agricultural Service.

CALENDAR OF CAMPUS EVENTS

June 15- June 17	Thurs.- Sat.	Outdoor Track - NCAA Meet at Eugene, Oregon.
June 17	Sat.	Graduate Record Exam.
June 21	Wed.	Examinations.
June 22	Thurs.	Examinations.
June 26	Mon.	Orientation, new students.
June 27	Tues.	Registration - second session summer school, all students.
June 28	Wed.	Classes begin.

CLEMSON, UNC SPONSOR HEALTH CONFERENCE

Clemson and the University of North Carolina at Chapel Hill have announced the first "Carolinas Conference on Occupational Health," which will be held at Clemson July 20-21. The annual conference, to alternate between the two schools, emphasizes both engineering and medical aspects of occupational health, a subject of growing national concern. Participants will come primarily from the Carolinas, Georgia and Eastern Tennessee.

Sponsors of the conference are Clemson's College of Engineering, UNC's School of Public Health, Occupational Health Section of the N.C. State Board of Health, and Division of Occupational Health of the S.C. State Board of Health.



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JUN 30 1972 SOUTH CAROLINA ROOM

CLEMSON NEWSLETTER

INFORMATION FOR THE STAFF OF CLEMSON UNIVERSITY

Vol. 11 No. 22

July 1, 1972

DR. MULKEEN HEADS COUNSELING CENTER

Dr. John F. Mulkeen, who for the past year has served as a counseling psychologist with the University's Office of Student Affairs, will become the new director of the University's Counseling Center July 1.

His appointment is announced by Walter T. Cox, vice president for student affairs and dean of students.

Dr. Mulkeen succeeds the retiring director, Dr. Virginia S. Hardie who established the counseling service 10 years ago and served as the University's first counseling psychologist. (Continued on page 2.)



UNIVERSITY RECEIVES SCHOLARSHIP GRANT -- Representatives of the Columbia plant of Allied Chemical Co., George W. Mzingo, center, superintendent of quality control, and Ralph Varnadoe, right, superintendent of staple processing, present a \$1,500 check from the Allied Chemical Foundation, New York City, to President Robert C. Edwards. The grant makes possible two \$750 scholarships for undergraduates majoring in a textile-related field in the 1972-73 school year.

Today the staff has grown to three full-time professionals who provide free counseling services to all registered Clemson students and their wives. The Center provides an attentive ear and advice on a broad range of questions and problems involving academic, vocational, emotional, and other matters.

Dr. Mulkeen came to Clemson last July after several years of experience in counseling and psychological consulting services with Northeastern Illinois University, the University of South Florida, and the public schools of Natick, Mass.

He is a Fitchburg, Mass., native, and holds degrees from Fitchburg State College (B.S., 1960), San Francisco State College (M.A., 1964), and Arizona State University (Ed.D., 1969). He is a member of the Pickens County and S.C. Mental Health associations.

Dr. Hardie, whose career as a counselor, educator, and administrator spans three decades, is author of numerous professional publications including the book "Women at Work."

During her outstanding career, Dr. Hardie has held teaching positions at universities and colleges in five states and served as special consultant to business, industry, U.S. government, and education. She has also owned and directed private counseling offices in New York City and Augusta, Ga., and was counselor trainer for the State of Colorado in 1954-55.

"Dr. Hardie is an inspiration to all of us who have worked with her," said Dr. Mulkeen. "Thanks to her devotion to students, we have a strong program at Clemson and I'm looking forward to the challenges of the future."

HOLTZENDORFF SCHOLARSHIP IS ESTABLISHED

A scholarship honoring the late Preston B. Holtzendorff Jr., who served 40 years as general secretary of the Clemson YMCA, has been established at the University by friends of the former university official.

The P.B. Holtzendorff Jr. Scholarship will be awarded annually to one or more students "who have demonstrated an interest in YMCA, church or related activities that promote the ideals and service exemplified by Holtzendorff's life work."

About 70 per cent of the \$20,000 goal for the scholarship fund has been reached.

Recipients and amounts of each award, renewable yearly provided satisfactory academic progress is maintained, will be determined by the University honors and awards committee.

"Holtzy," as he was known to associates and thousands of Clemson students, was cited in 1971 for outstanding service to the University when the campus YMCA was officially named for him.

An Atlanta, Ga., native and the fourth son in his family to be graduated from the University of Georgia Law School, Holtzendorff first came to Clemson in 1916, the year the YMCA building was completed. He was the institutions's first assistant secretary.

HOLTZENDORFF SCHOLARSHIP IS ESTABLISHED Continued

In World War I "Holtzy" traded his "ground duty" at college for pilot's wings in the Army Air Corps. After the war he practiced law briefly with his brothers in Oklahoma.

In June 1919 Holtzendorff returned to Clemson as YMCA general secretary, a position he held until his retirement in 1959.

GIFTS AND GRANTS

The University will receive funds totaling \$114,500 from the J.E. Sirrine Textile Foundation of Greenville over the next two academic years to help support its textile education programs.

The Foundation's Board of Trustees has approved allocations of \$56,500 for the 1972-73 school year, and \$58,000 for the 1973-74 term.

The grants will be used to fund various projects and programs of the college of Industrial Management and Textile Science, including scholarship and fellowship assistance for superior students, and the creation of a second J.E. Sirrine Professorship which provides a salary supplement to an outstanding faculty member.

The J.E. Sirrine Textile Foundation is a non-profit corporation established to aid and promote by financial assistance and other means, textile education, training, and research in South Carolina. Its Board of Trustees comprises 18 of the state's leading textile executives.

Since 1947, the Foundation has allocated over \$1.5-million to Clemson for textile education.

Through the years, the funds have been used for such purposes as faculty salary supplements, creation and maintenance of the J.E. Sirrine Textile Library on the Clemson campus, a travel fund which enables professors to attend technical and trade association meetings to keep abreast of developments in the industry, and undergraduate and graduate scholarship programs.

FACULTY, STAFF RETIREMENTS

More than two centuries of service to the University ends this summer with the retirement of eight staff and faculty members.

William J. Barker, associate professor and principle extension specialist in forestry, retires after 30 years; Larry B. Massey, Piedmont district agent, 38 years; Earl Liberty, purchasing director, 19 years; Bertha Morgan, Hanover House hostess, nine years; Virginia Poole, staff assistant in business and finance, 35 years; Robert H. Garrison, seed certification supervisor, 26 years, Walter Vance, janitor, 18 years; and James H. Henderson, poultry field foreman, 44 years.

MINUTES OF THE MEETING OF THE FACULTY SENATE, MAY 16, 1972

The meeting was called to order at 4:15 p.m. by President Rogers. The minutes of the March meeting were approved as circulated. President Rogers reported that he had written a letter on behalf of the faculty to President Edwards asking that he express to Mrs. Byrnes the faculty's appreciation for Dr. Byrnes' contribution to Clemson University and feelings of sympathy for his death. He further announced that the revised Faculty Manual had been given to the printer on April 4, 1972, and should be available for general distribution no later than July 1, 1972. Faculty Senate members are encouraged to become familiar with the new manual.

President Rogers reported that he had recommended to President Edwards that Prof. W. F. Steirer, Jr., be appointed as the Faculty Senate representative on the Student Relations Committee. Prof. J. D. Fulton would automatically become chairman of this committee because of his election as Vice-President of the Faculty Senate.

Ad Hoc Committee A (Faculty Club) was reappointed by President Rogers. Committee members are V. D. Carmack, J. A. Hash, R. L. Cross, K. E. Carpenter, and R. D. Shannon, Chairman.

In regards to the recommendations of Ad Hoc Committee B on book ordering, President Rogers reported that for the coming academic year, he would serve as an observer for the Faculty Senate in an effort to determine if everyone was following the recommendations.

President Rogers informed the Senate that he had been asked about grievance procedures for non-tenured faculty members, and requested that all members of the Senate become familiar with these procedures in the Faculty Manual.

There were no committee reports. Several items of new business were referred to the appropriate committee for their study and recommendations. These were tenure requirements (Policy and Welfare Committee), WF grades (Admissions and Scholarship), Admission to Candidacy for graduate degree regulations (Admissions and Scholarship) and Student Advisory and Counseling (Admissions and Scholarship).

The meeting was adjourned at 5:22 p.m.

Absent from the meeting were: B. M. Cool, A. H. Holt, and E. A. Freeman.

CIVIL ENGINEERING

Donald B. Stafford (Assoc Prof) presented a paper entitled "Aerial Remote Sensing Applications in the Coastal Zone" at the seminar on Planning and Engineering in the Coastal Zone held in Charleston on June 8-9.

Rudolf E. Elling (Assoc Prof) recently received a grant in the amount of \$4,000 from the Naval Research Laboratory concerning research on "Dynamic Responses of Shipboard Cranes."

Jackson S. Love (Asst Prof) and Rudolf E. Elling participated in a seminar on "The 1971 ACI Code" at the Greenville Technical Education Center June 9-10. The seminar was sponsored by the Portland Cement Association, Atlanta, Ga., and the Dept. of Civil Engineering.

William Baron (Assoc Prof), Joseph P. Rostron (Prof), and Robert Dulin (Grad Stu) participated in the ASCE specialty conference on "Performance of Earth and Earth-Supported Structures" at Purdue University in Lafayette, Ind., June 10-14.

Billy L. Edge (Assoc Prof) participated in a Conference on Planning and Engineering in the Coastal Zone in Charleston on June 8-9.

Herbert W. Busching (Assoc Prof and Hd) participated in a short course entitled "Mathematical Modeling of Natural Systems" at Manhattan College in New York City, May 30-June 2.

Myron Spector (Asst Prof) was awarded an NIH grant to use the one-million volt electron microscope at the U. S. Steel Research Center in Monroeville, Pa., to study pathological crystalline forms such as kidney stones, calcified atherosclerotic plaque, gout and pseudo-gout deposits.

William Baron, Billy L. Edge, and Benjamin C. Dysart III (Assoc Prof) have been awarded a \$12,000 grant on "Utilization of Diked Disposal Areas in South Carolina" by the National Sea Grant Program.

COLLEGE OF ENGINEERING

S. F. Hulbert (Assoc Dean), C. N. Wilson (Ohio State), and J. E. Lemons (Univ. of Ala. at Birmingham) presented a paper entitled, "The Role of Sintering in the Development of Controlled Microstructures for Bioceramics" at the Third International Conference on Sintering and Related Phenomena at Notre Dame, Ind., June 7.

COLLEGE OF ENGINEERING - Continuing Education

A workshop on "The Manufacture of Ceramics" will be presented July 13-15. The workshop is sponsored by the Ceramic Engineering Dept. and is for superior high school students.

The "Carolinas Conference on Occupational Health" will be held at the Clemson House on July 20-21.

The Dept. of Electrical and Computer Engineering will conduct a workshop for high school students on "Interactive Computing" on July 24-28.

Additional information may be obtained from Professor J. K. Johnson, Director of Engineering Extension, College of Engineering.

COLLEGE OF NURSING

Dean Geraldine Labecki has received notification that continuation for the second year of the undergraduate psychiatric nursing project "Integration of Mental Health Concepts" has been approved by the National Advisory Committee on Mental Health. The amount of the award for the second year of this five-year project is \$24,235.

ENGLISH

Corinne Sawyer (Assoc Prof) has been appointed judge in the 1972 Achievement Awards Program sponsored by the National Council of Teachers of English.

Rodney O. Rogers (Asst Prof) has an article, "Stephen Crane and Impressionism" reprinted in Stephen Crane's Career: Perspectives and Evaluations, published by New York University Press.

FOOD SCIENCE

J. H. Mitchell, Jr. (Prof) attended the meeting of the Institute of Food Technologists in Minneapolis, May 21-24, and presented a paper entitled "Effect of Heat Processing on Lipxygenase, Peroxidase, and Hydroperoxide-Isomerase Activity in Spanish Peanuts."

MECHANICAL ENGINEERING

A paper entitled "Second Derivative of the Flutter Velocity and Optimization of Aircraft Structures" co-authored by Carl S. Rudisill (Assoc Prof) and Kumar G. Bhatia (Langley Research Center) has been accepted for publication by the AIAA Journal.

C. A. Brandon (Assoc Prof) presented an invited paper to the 33rd Annual Conference of the Chemurgic Council meeting in Washington, D.C. on May 11. The paper "Reuse of Textile Dye Wastes" will appear in the published proceedings of the Council.

T. T. Yang (Prof) presented an invited seminar on "Inverse Approach in Diffuser Design" to the Mechanical Engineering Dept. of the University of Tennessee at Knoxville on May 8.

T. T. Yang received a grant of \$33,264 from the U. S. Army for continuation of his studies of Eschar Debridement.

PHYSICS

E. W. Sawyer (former Grad Stu) and A. L. Laskar (Assoc Prof) recently had a paper published in the Journal of Physical and Chemical Solids entitled "Diffusion of Cadmium in Pure and Cadmium Doped Silver Chloride."

R. L. Chaplin (Assoc Prof) and T. N. O'Neal (former Grad Stu) had a paper published in the May 15 issue of Physical Review B entitled "Electron-Irradiation Effects in Magnesium."

J. R. Manson (Asst Prof) had a paper published in the April 1 issue of the Journal of Chemical Physics entitled, "Simple Model for the Energy Accommodation Coefficient."

P. A. Steiner (Asst Prof) had a paper published in the Journal of Molecular Structure entitled "Microwave Spectra of Isotopic 1,3,4-Oxidiazoles."

Beverly B. Bookmyer (Assoc Prof) recently spent three weeks at the Observatorio Astronomico Nacional in Sierra de San Pedro Martir, Baja California, Mexico, where she obtained photoelectric measurements of selected eclipsing binary systems.

SOCIAL SCIENCES

J. L. Arbena (Asst Prof) has published a review in the American Historical Review, (April 1972) of John V. Lombardi, The Decline and Abolition of Negro Slavery in Venezuela, 1820-1854.

CLEMSON UNIVERSITY AT SUMTER

J. C. Anderson, Jr. (Director) attended the third Annual International Institute on the Community College held at Lambton College, Sarnia, Ontario, Canada, June 14-16, and participated in the program Goalsetting for Organizational Accountability. The theme of the conference was "The Pragmatics of Accountability."

CALENDAR OF CAMPUS EVENTS

July 1	Sat.	No classes.
July 8	Sat.	No classes.
July 15	Sat.	No classes.
July 18-	Tues.-	State 4-H Convention - campus.
July 21	Fri.	

PROCEDURES FOR SUBMITTING NEWSLETTER MATERIAL

All Calendar items of campus events (speakers, films, meetings, seminars, sporting events, etc.) should be submitted by written memorandum directly to the Office of Public Relations, Trustee House. Information and news items from the Office of the President, Vice President for Business and Finance, Vice President for Executive Affairs, Vice President for Student Affairs and the Vice President for Development should be submitted by written memorandum to the Office of Public Relations, Trustee House. Information and news items from all areas under the Vice President for Academic Affairs should be submitted by written memorandum to Dr. Claud B. Green, Room 28, Tillman Hall.

The following deadlines prevail: Items to appear in the Newsletter published the 1st of each month must be submitted by the 20th of the previous month; items to appear in the Newsletter published the 15th of each month must be submitted by the 5th of each month.

CLEMSON NEWSLETTER

INFORMATION FOR THE STAFF OF CLEMSON UNIVERSITY

Vol. 11 No. 23

July 15, 1972

DR. LUTHER ANDERSON APPOINTED TO DEANSHIP

Dr. Luther P. Anderson, South Carolina native and Clemson faculty member, has been named dean of the University's College of Agricultural Sciences.

In announcing the appointment, President Robert C. Edwards emphasized that a healthy agricultural industry remains basic to the economic welfare of the state, and strong leadership is necessary to insure the industry's orderly future growth.

He pointed out that in 1971, the value of agricultural commodities produced in South Carolina at the farm level, including government payments, totaled \$552 million -- a 30 per cent increase over the past decade.

"The potential for more dramatic future growth at an even greater rate is clearly evident," said Dr. Edwards. He added, however, that continued expansion will demand increased research efforts to deal with complex environmental questions and other problems.

"In its role as a land-grant university," said Dr. Edwards, "Clemson has the responsibility for providing the type of leadership necessary to solve the industry's problems and inspire the confidence of agricultural leaders state-wide who are engaged in crop production."

Anderson has been associated with Clemson in various regional and state-wide leadership positions in agriculture and related fields for the past 22 years.

Since last August, he has served as professor and head of Clemson's department of agronomy and soils.

The 46-year-old Horry County native has been prominent in state-wide educational work since 1958 when he came from Bishopville to become assistant extension agronomist. He was promoted to leader of extension agronomy work in 1962, and to state leader for all extension agricultural programs in 1969.

Prior service with Clemson includes eight years as assistant county agent in Horry and Lee counties (1950-58).

Dr. J.W. Jones, director of resident instruction, has served as interim dean since March.

OUTSTANDING EDUCATORS HONORED AT DEDICATION

Dedication ceremonies for five College of Engineering buildings were held July 7 to honor the outstanding academic leaders in the growth of engineering education at Clemson.

Families and friends of the late educators were special guests of the University for the program.

The facilities, all of which have been constructed or renovated since 1950, are named in honor of faculty members who served in the civil, agricultural, electrical, industrial, and mechanical engineering departments during the years from 1913-1965.

As part of the ceremonies, various College of Engineering faculty members who were professional colleagues of the honorees gave a tribute to each of the five.

Following remarks and acceptance of the buildings for the University by President Robert C. Edwards, families and guests adjourned to the respective buildings where portraits of each educator were placed in prominent locations.

Buildings dedicated and the professors for whom they are named are:

Cook Engineering Laboratory, Dr. James C. Cook Jr.; Freeman Hall, Edwin J. Freeman; Lowry Hall, Walter L. Lowry Jr.; McAdams Hall, William N. McAdams; and Rhodes Engineering Research Center, Samuel R. Rhodes.



DISTINGUISHED EDUCATORS REMEMBERED -- President Robert C. Edwards, right, is shown with relatives of five former Clemson engineering professors who were honored in building dedication ceremonies July 7. Left to right are Mrs. Lucille McAdams, widow of William N. McAdams; Mrs. Polly Lowry, widow of Walter L. Lowry Jr.; Edwin A. Freeman, son of the late Edwin J. Freeman; Mrs. Irene Cook, widow of Dr. James C. Cook Jr.; Louis S. Freeman, son of E.J. Freeman; and Mrs. Emma Rhodes, widow of Samuel R. Rhodes.

DIRECTOR OF ENGINEERING EXTENSION IS NAMED

Prof. J. Karl Johnson Jr., veteran faculty member of the College of Engineering, has been named director of engineering extension for the college effective July 1.

In announcing the appointment, Dean Linvil G. Rich said Johnson will be responsible for coordinating all continuing education programs of the college.

Johnson will head the Office of Industrial and Municipal Relations, the college's public service unit which offers a regular slate of workshops, short courses, seminars and conferences for engineers and managers throughout the state.

"In our technically oriented society it is absolutely essential that the engineer, the technician, industrial managers and governmental personnel keep abreast of changes in modern technology throughout their careers," said Johnson.

"One of the most important services the College of Engineering can perform for the people of South Carolina and the Southeast is in this area of continuing professional education," he said.

CLEMSON EDUCATOR NAMED TO STATE PCA

Dr. John F. Andrews, Clemson professor and a nationally recognized educator in the field of pollution control, has been appointed to a four-year term on the S.C. Pollution Control Authority.

Andrews, who is head of Clemson's department of environmental systems engineering, has been named by Gov. John C. West as Third Congressional District representative on the 13-member Authority.

The Authority together with its technical staff is charged with controlling existing pollution and preventing new pollution of the surface and ground water and the air of South Carolina.

UNIVERSITY COMMUNICATIONS CENTER

Harry Durham, director, will conduct a workshop on "Making It With the Electronic Media" for all participants at the national conference of the American College Public Relations Association July 17-19 at Minneapolis. Some 300 public relations and development personnel from institutions across the country will attend.

Featured on the workshop program will be experts on hard news for radio and TV, public service announcements, broadcast features, slide presentations and motion pictures.

MINUTES OF THE HONORS COUNCIL MEETING, JUNE 16, 1972

The final meeting of the Honors Council was held in Room 103 Strode Tower at 3:15 p.m. Present: Norman Olsen, Jr. (Chairman), Joe Adair for M. A. Packer R. D. Shannon, B. E. Gilliland, Elizabeth Hall, J. D. Maxwell, Patricia Wannamaker.

The council approved awarding Junior Division Honors Program Certificates to the following students, effective May 1972:

Roxana Alam
Kim T. Deacon
Earl Randolph Gatlin
Anne Cheryl Harkey
Hans Jacob Haven
Edward Elem Hayes
Nancy Ellen Jacobs

Marianna M. McKeown
Beulah Lynn Prosser
Gary Stephen Ragan
Terry Allan Reid
Roger Alan Taylor
Elaine Beth Walsh
Michael E. Zeager

Professor Maxwell presented a proposed Departmental Honors Program for the College of Agricultural Sciences. The council approved the proposed program and two new courses involved in the program, Agric H491 and Agric H492.

The meeting was adjourned at 3:45 p.m.

CHEMISTRY

John Jacobus (Assoc Prof) presented a lecture, "Conformational Analyses by NMR Spectroscopy," before the Chemistry Division at Georgia Institute of Technology, May 18.

CIVIL ENGINEERING

Herbert W. Busching (Assoc Prof and Hd) was an invited participant in the National Commission on Materials Policy Forum held in Atlanta, Ga. at the Georgia Institute of Technology on June 25-28.

Donald B. Stafford (Assoc Prof) presented a paper entitled, "A Review of the Coastal Engineering Applications of Aerial Remote Sensing Techniques" to the 13th International Conference on Coastal Engineering held in Vancouver, British Columbia, Canada, on July 3-18.

Billy L. Edge (Assoc Prof) presented a paper to the 13th International Coastal Engineering Conference in Canada entitled, "Mathematical Analysis of Sludge Dumped in Coastal Waters."

CIVIL ENGINEERING (Continued)

Rudolf E. Elling (Assoc Prof) received a grant to participate in the National Science Foundation's Institute on engineering education and professional practice to be held at the Illinois Institute of Technology in Chicago in July.

Joseph P. Rostron (Prof) was funded to attend a symposium on relative density at the Annual ASTM Meeting in Los Angeles, Calif. on June 27.

COLLEGE OF ENGINEERING

S. F. Hulbert (Assoc Dean) presented a paper entitled, "Biomaterials for Orthopedic and Oral Implants" at the Annual Conference of the ASEE, Lubbock, Texas on June 21.

James L. Edwards (Asst to the Dean) participated in meetings of the Membership Policy Committee of the American Society for Engineering Education at its annual meeting in Lubbock, Texas, June 19-22.

ECONOMICS DEPARTMENT

Donald W. Lyons (Assoc Prof) and Lowell Nordquist presented a Safety and Health Seminar for Local Governmental Supervisors at Sumter, June 28 and Horry-Georgetown TEC, Conway, June 29.

GEOLOGY

Villard S. Griffin (Assoc Prof) gave an invitational talk on the South Carolina Piedmont at the Geological Society of America Penrose Conference on the Geology of the Northern Piedmont, June 4-9, at Frederick, Md.

R. D. Hatcher (Assoc Prof) was an invited participant in the Penrose Conference on the Northern Piedmont, held in Frederick, Md., June 4-9.

ENTOMOLOGY AND ECONOMIC ZOOLOGY

Ray Noblet (Asst Prof) attended a conference in Sumter, June 20-21, to consult with officials from the American Cyanamid Company and the Communicable Disease Center concerning black fly biology and control. This work is preliminary to a 15-year black fly control program to be conducted in Africa under the director of the World Health Organization.

W. C. Nettles (Assoc Prof), formerly Leader, Extension Entomology and Plant Pathology, retired on June 30 after serving Clemson University in the field of Entomology for 44 years.

HORTICULTURE

F. B. Ledebor (Asst Prof) attended the annual research conference of the Southern Regional Turf Research Committee at Mississippi State University. Secretary F. B. Ledebor was elected Vice-Chairman for the coming year.

INTERDISCIPLINARY STUDIES

H. R. Bungay III (Prof) had an article entitled, "Proportional Controller for Flow Rate," published in Biotechnology and Bioengineering, Vol. XIV, 291 (1972).

INDUSTRIAL EDUCATION

J. Page Crouch (Assoc Prof) presented the findings of the recently completed Graphic Arts Inventory for Education to the Seventh District Conference of the International Association of Printing House Craftsmen held in Greenville on June 17. Dr. Crouch was installed as second vice president of the Greenville Club.

The Graphic Arts area of the Dept. of Industrial Education recently received national publicity with a two-page article in a ULANO publication. ULANO is a materials manufacturer for the Graphic Arts Industry.

INDUSTRIAL EDUCATION (Continued)

The Printing Industry of the Carolinas Association recently met at Clemson University for a presentation of the PICA-Clemson Graphic Arts Inventory for Education findings. Present were officers of the regional trade association, the Printing Industry of the Carolinas.

POULTRY SCIENCE

B. W. Bierer (Prof) has received a \$5,000 grant from the Veterinary Science Div., ARS, USDA for research to determine the duration of immunity to fowl cholera imparted by a vaccine developed in his laboratory.

Dr. Bierer was named "Veterinarian of the Year" by the S. C. Association at the annual meeting in Greenville, June 16. His work as a Poultry Science disease researcher and his dedication as a diagnostician in the Livestock-Poultry Health Lab were cited in the presentation.

M. A. Boone (Prof on leave) presented a Country Report on the Republic of Vietnam at the Second Seminar of the Asian Association of Agricultural Colleges and Universities Apr. 24-May 3 at the University of the Philippines at Los Banas. At the same meeting he served as a discussant on the topic, "Population in Relation to Economic Growth and How the University Addresses Itself to this Problem."

Juan Solis (Asst Prof) has resigned effective July 15 to accept employment with a commercial firm which will locate him in Sao Paulo, Brazil.

SOCIAL SCIENCES

E. M. Lander (Alumni Prof, History) has published a review in the South Carolina History Magazine (April 1972) of Alonza McLaurin, Paternalism and Protest: Southern Cotton Mill Workers and Organized Labor, 1875-1905. He also contributed the chapter "Sarah Word" in South Carolina's Distinguished Women of Laurens County (Columbia, 1972).

TEXTILE DEPARTMENT

Donald W. Lyons (Assoc Prof) presented a paper entitled, "Educational Programs in Noise Control" at the annual conference of the American Society of Engineering Educators held in Lubbock, Tex.

TEXTILE DEPARTMENT (Continued)

John D. Hatcher (Asst Prof) presented a paper entitled, "The Reduction of Spinning Frame Noise," at the annual conference of the American Society of Engineering Educators held in Lubbock, Tex.

Donald W. Lyons has received notification of the renewal of the cooperative research program between Clemson University and the U.S. Department of Agriculture. Dr. Lyons is the principal investigator for this program which has continued for five years. With this renewal, the total grants to Clemson for this program now exceed \$120,000.

D. W. Lyons presented a paper on "Safety and Health in Public Works Operations" at the annual meeting of the Public Works Association which was part of the S. C. Municipal Association meeting in Myrtle Beach.

ZOOLOGY DEPARTMENT

William Bachop (Asst Prof) and Bruce Mackler (Univ of Wash) published an electron microscopic study of respiratory-deficient mitochondria in the April issue of the American Microscopical Society Transactions.

CALENDAR OF CAMPUS EVENTS

July 15	Sat.	No classes.
July 18-	Tues.-	State 4-H Convention - campus.
July 21	Fri.	
July 18	Tues.-	OSHA Public Sector Safety Specialists Workshop, College
July 20	Thurs.	of I.M. & T.S. - Sirrine Auditorium.
July 22	Sat.	No classes.
July 22	Sat.	Graduate School Foreign Language Test.
July 25-	Tues.-	Statewide 4-H Conference, College of Agricultural
July 28	Fri.	Sciences - campus.
July 26-	Wed.-	General Management Seminar, College of I.M. & T.S. -
July 27	Thurs.	Sirrine Hall.
July 26	Wed.	Engineering Control of Cotton Dust, College of I.M. &
		T.S.
July 29	Sat.	Classes meet today.
Aug. 2-	Wed.-	Examinations.
Aug. 3	Thurs.	
Aug. 5	Sat.	Army ROTC Commissioning -- Graduation.

CLEMSON

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Aug 31 1972

NEWSLETTER

INFORMATION FOR THE STAFF OF CLEMSON UNIVERSITY

Vol. 11 No. 24

August 1, 1972

REORGANIZATION ANNOUNCED FOR SOCIAL SCIENCES

The University has announced a major reorganization of the social sciences to accommodate expanding student enrollments. Three new academic divisions have been formed:

-- Department of History, headed by Dr. Robert S. Lambert, professor of history and head of the old department of social sciences.

-- Department of Psychology, headed by Dr. Bernard Caffrey, associate professor of psychology.

-- Department of Political Science and Sociology, headed by Dr. Charles W. Dunn, assistant professor at the Institute of Government of the University of Illinois, who joins Clemson August 1.

Dean H. Morris Cox of the College of Liberal Arts reports that the total number of students choosing majors in social sciences has increased from a handful to over 400, and total enrollment in the social sciences has passed 3,000.

Dean Cox cites two reasons for increased interest in social sciences at Clemson: science and engineering curricula requiring more background in the social sciences, and increased enrollment of women seeking degrees in the social sciences.

Dunn comes to Clemson fresh from a stint as special consultant to News Election Service (for NBC, CBS, ABC, the Associated Press and United Press International) for the 1972 Illinois Primary Election. The Bloomington, Ill., native has served as administrative aide to former U.S. Sen. Charles Goodell (N.Y.) and as a platform subcommittee staff advisor to the 1968 Republican National Convention. He is author of the forthcoming book Politics of Non-Reform.

Lambert, a 23-year veteran of the Clemson faculty, has been head of the social sciences department since 1963. A native of New York City, he is an expert on 19th Century American history.

Caffrey, a Uniontown, Pa., native and Clemson professor since 1966, is a recognized authority on the psychological aspects of coronary heart disease, and decision making under stressful conditions.

ROTC CHANGES COMMAND; TYNDALL JOINS UNIVERSITY STAFF

Col. E.N. Tyndall, commander of Air Force ROTC, has retired after more than 30 years of active military service.

Leadership of the detachment passed into new hands July 31 at retirement and change-of-command ceremonies for Tyndall and his successor, Col. Duncan W. Rabey Jr. of Tullahoma, Tenn.

Tyndall has now joined the university staff as administrative assistant to President Robert C. Edwards.

Col. Peter D. Summer, commandant of Air Force ROTC Area "C" which includes Clemson, presented a retirement certificate and meritorious service medal to Tyndall.

Tyndall came to Clemson as professor and head of the university's aerospace studies department and commander of the Air Force ROTC detachment in September 1967. Before the Clemson assignment, he commanded a communications group in the Philippines and served in various staff positions in the Pentagon and Strategic Air Command. His decorations include the Distinguished Flying Cross and the Air Medal.

Rabey, the new Clemson Air Force ROTC commander, is a 1948 Clemson alumnus whose last assignment was with the Arnold Engineering Development Center at Tullahoma where he was director of tests. He has served in various Air Force research and development management positions including a tour as chief of range missile safety at Cape Kennedy.

MASTER OF EDUCATION TO BE OFFERED AT OFF-CAMPUS LOCATIONS

Clemson has announced that it is implementing a new graduate study arrangement for teachers and other school personnel that will enable them to complete all required courses of study for the master of education degree at off-campus locations. Previously, only 12 hours of off-campus courses could be taken for credit toward the degree. The remaining 18 had to be completed on the main campus.

The new service will begin this fall at Piedmont TEC Center at Greenwood. Clemson has offered graduate education courses there for several years.

In making the announcement President Robert C. Edwards said the new arrangement was made possible by a change in the requirements of the Southern Association of Colleges and Schools and with the approval of the Commission on Higher Education.

All courses toward the master's degree will be taught by Clemson faculty members. Course fees are the same as on the main campus. Six to eight graduate credit courses will be offered the fall semester at Greenwood.

CLEMSON ANNOUNCES POLICY ON TRANSFER OF TEC STUDENTS

Academic credits received for courses taken at South Carolina's technical education centers can be transferred to Clemson for application toward a baccalaureate degree. Dean of Undergraduate Studies Dr. Claud B. Green explains that transfer credit is allowed for those TEC courses which are determined to be equivalent in content to courses offered at Clemson. The equivalency evaluation is made on a course-by-course basis by the individual Clemson departments which offer the comparable course. Students can also earn equivalent course credit through a special written examination.

MRS. CHENEY NAMED UNIVERSITY PUBLICATIONS EDITOR

Mrs. Beulah R. Cheney has joined the Public Relations staff as University Publications Editor. She will be responsible for producing various Clemson publications including the President's Annual Report, the Student Handbook and the Clemson Newsletter. She will also assist colleges and departments of the University with their publications, such as development of recruiting brochures and other printed materials.

Before moving to Clemson Mrs. Cheney was internal communications supervisor and publications editor for Integon Corporation, a financial services company in Winston-Salem, N.C. Last year she was a teacher of English at Seneca High School. A native of Alabama, Mrs. Cheney holds a journalism degree from the University of Georgia. She is married to Henry W. Cheney Jr., director of Duke Power Co.'s Keowee-Toxaway Visitors Center.

COMMUNICATIONS STAFF WINS AWARDS

Clemson's agricultural communicators were recipients of several awards presented by the 1972 Critique and Awards Program of the American Association of Agricultural College Editors. Clemson was one of eight states to receive a blue-ribbon (the highest) award for its "Press Service for Weekly Newspapers" and one of three states to win the blue-ribbon award for its entry (on housing) in "Large Exhibits."

White ribbon (third highest) awards were also won for these categories: "Press Service for Daily Newspapers," "Popular Extension or Research Leaflet or Pamphlet," "Popular Bulletin or Circular," and "Special Visuals."

Communications staff members who helped create these winning entries include Dr. R.C. Hubbard, Luke C. Hamilton, J. Harold Rogers, Doris A. Timmerman, Andrew J. Curry, William B. Earle, Jr., and Lewis W. Riley.

OFFICE OF PUBLIC RELATIONS

The 1969-70 "Report of the President," published by the Department of Public Relations and printed by Band & White, Inc. of Spartanburg, won first place in the Graphic Arts Award competition sponsored by the Printing Industry of the Carolinas. The report was cited "for excellence in concept, design, presentation and printing" in the Educational Publications and Brochures Classification.

ABOUT 400 WILL GRADUATE AUGUST 5

Graduation ceremonies for about 400 students will be held in Littlejohn Coliseum Saturday, August 5, at 11:15 a.m.

Commissioning ceremonies for about 20 ROTC cadets who are candidates for second lieutenant commissions will be held at 8:30 a.m. Col. Thomas Maertens, head of Clemson's military science department, is featured speaker for the ceremony at the Holtzendorff Y.M.C.A.

CAMPUS SPEAKERS BUREAU ANNOUNCES TENTATIVE SCHEDULE

A tentative schedule for 1972-1973 campus speakers includes Douglas Kiker and Paul Duke (Sept. 12), Pierre Salinger (Oct. 4), Robert Reisner (Oct. 31), John McCook Roots (Nov. 15), Julian Bond (Nov. 30), Brit Hume (Jan. 17), Russ Burgess (Feb. 6), Ellen Peck (Feb. 16), Ralph Nader (Mar. 7), Frank Reynolds (Mar. 29), and Senator Fred Harris (Apr. 18). All speakers will appear at 2:00 p.m. (except Nader who will appear at 1:00 p.m.) in Tillman Auditorium (except Roots and Harris who will appear in Daniel Auditorium).

MINUTES OF UNIVERSITY UNDERGRADUATE COUNCIL, JULY 17, 1972

The first meeting of the University Undergraduate Council was held in Room 32 of Tillman Hall with the following present: Dean Claud B. Green (Chairman), Luther Baxter, Carolyn Briscoe, Lamar H. Brown, Sam F. Crews III (Student Representative), Robert T. Cross, C. C. Fain, Lawrence W. Gahan, Tommy Lavender (Student Representative), J. V. Reel, E. A. Vaughn, K. N. Vickery and M. L. Wolla.

Dean Green announced that the Undergraduate Council will perform many of the duties formerly delegated to the Curriculum Committee. One primary function of the committee will be the consideration of proposals for change within existing undergraduate programs and for the addition of new programs.

Dean Vickery recommended that the Council assume responsibility for acting on student petitions for continuing enrollment following the summer term. His recommendation was approved.

A proposal submitted by the Department of Industrial Management for a major in occupational safety and health was explained by Dr. E. A. Vaughn. As proposed, the program will provide a new major within the existing curricular structure of the Bachelor of Science Degree in Administrative Management.

Following discussion of the proposal Dean Green appointed a committee to study the proposal and to make recommendations to the Council at the next meeting. Members appointed to the committee were: J. V. Reel, Chairman; C. C. Fain; and E. A. Vaughn.

The next meeting of the Council is scheduled for July 31.

MINUTES OF THE MEETING OF THE FACULTY SENATE, JUNE 13, 1972

The meeting was called to order at 4:20 p.m. by President Rogers. The minutes of the May meeting were approved as circulated. President Rogers recognized the summer substitutes for senators and welcomed them to the Senate. President Rogers discussed the recent reorganization of the Clemson Alumni Association and the Clemson University Foundation. In response to questions, he also informed the Senate that the selection of Alumni Professors was made by the University Administration, and not by the Alumni Association. The general feeling of the Senators was that there should be faculty input into this selection.

In regards to book ordering, President Rogers reported that all book orders for the fall semester were in on time. He further stated that the Book Store was accumulating paperback books at a value rate of \$4000 per year, and at present the Book Store had an inventory of paperback books in excess of \$18,000. He pointed out that in many instances twice the number of books were ordered by instructors than were purchased, and that in some instances books were requested and none were purchased. This leaves the Book Store with a large investment in books which they can't sell. This, in turn, causes higher prices on other books. Therefore, he requested that all instructors please be more careful in their requests for ordering books through the Book Store.

President Rogers informed the Senate that he and Professor Castro, Chairman of the Policy Committee, had met with Dean Hurst regarding the new faculty manual. Dean Hurst requested that, even though the manual would always be subject to interpretation, there be a two year moratorium on major revisions of the manual. He further suggested that the Policy Committee keep a file on recommendations for revisions and/or changes in the manual and that all these be reviewed at the end of this two year period. The expected delivery date on the printed manual is still July 1, 1972. President Rogers reported that Dean Hurst had informed him that the effective date for the recent changes in the annual leave policy for twelve month employees was April 1, 1972.

President Rogers reported that he had written a letter on behalf of the faculty to President Edwards asking that he express to the Smith family the faculty's appreciation for Mr. Winchester Smith's contribution to Clemson University and feelings of sympathy for his death.

Professor Fanning, chairman of the Admissions and Scholarship Committee, reported that the committee had reviewed the new manual for faculty advisors and that it would be distributed before the beginning of the fall semester. The committee was very complimentary of the new manual. He further reported that the committee had discussed the recording of class absences on grade reports and decided against the request.

MINUTES OF THE MEETING OF THE FACULTY SENATE, JUNE 13, 1972 (Continued)

Professor West, chairman of the Welfare Committee, reported that Banks McFadden, Director of Intramural Sports, had met with the committee and reported on the tennis facilities available on campus. Director McFadden informed the committee that ten new courts will be completed in 1973, and that he is working on some type of reservation system for the tennis courts. Professor West further reported that he had inquired about the sick leave policy for summer sessions for nine months employees. He stated that if an instructor became sick before summer school began, and could not meet his classes, this would void his contract.

The first item of new business was the presentation by the Admissions and Scholarship Committee of the following resolution:

"WHEREAS, the grade designation WF is synonymous with the grade F, and therefore redundant; and

WHEREAS, numerous problems have arisen in the counseling and advising of students in the computations and comparison of GPR's due to the wide disparity in the application of the WP-WF system by the Clemson University Faculty; and

WHEREAS, the replacement of WF with the grade designation W would remove undue pressures and uncertainties from the teacher, encourage the student to build up his GPR in, and his understanding of, his major courses, and discourage the current practice of students dropping out of college because of poor grades; therefore

BE IT RESOLVED that the following paragraph replace the fourth and fifth paragraphs on page 117 of the Scholastic Regulations in the 1972 Clemson University Announcements:

W-Withdrew. This grade indicates that the students withdrew from the course. No credit hours taken are recorded for the grade of W provided that course is dropped prior to the last five weeks of classes in the semester. Only semester grades shall be given and recorded for courses dropped during the last five weeks.

BE IT FURTHER RESOLVED that the last sentence of the paragraph on "Grade Points" on page 118 be amended to read:

Grade Points. --- No grade points are assigned for grades F, I, or W."

There was a motion and second to accept the resolution.

MINUTES OF THE MEETING OF THE FACULTY SENATE, JUNE 13, 1972 (Continued)

Professor Fulton moved that the resolution be amended as follows:

"W-Withdrew. This grade indicates that the students withdrew from the course. No credit hours taken are recorded for the grade of W provided that course is dropped prior to mid-term. Semester grades shall be given and recorded for courses dropped after mid-term."

After a second, the amendment failed to carry on a 4 to 17 vote.

The resolution as originally presented passed on a 17 to 3 vote.

As a result of the interpretation of the tenure policy in the new faculty manual, Professor Fulton presented the following resolution:

"WHEREAS, in the case of an offer of employment made in consultation with the dean of his college by a University department chairman to a former employee with two years' prior experience at Clemson University, the Academic Dean of the University has amended the Faculty Manual without the approval of the Faculty Senate, the President of the University, and the University Board of Trustees by his insistence that a minimum of 4 consecutive academic years of service at the University is a prerequisite for tenure in any rank, and

WHEREAS, in the opinion of the University Counsel the application by the Academic Dean of the University to all the University faculty the added requirement that a minimum of 4 consecutive academic years of service at Clemson University is necessary before he will approve tenure amounts to an unauthorized amendment to a legal document, the Faculty Manual, and conceivably could leave the University open to an unfavorable lawsuit, and

WHEREAS, the Academic Dean of the University has said to the President of the Faculty Senate that the Faculty Senate in drafting the Faculty Manual on Appointments for Which Tenure is Attainable should have anticipated the Dean's interpretation of the minimum service requirement for tenure and should have disclaimed that interpretation, now, therefore, be it

RESOLVED THAT the Academic Dean of the University cease his insistence that the department chairman write a letter to the prospective faculty member correcting the chairman's early tenure eligibility statement in the chairman's original offer letter. Be it further

MINUTES OF THE MEETING OF THE FACULTY SENATE, JUNE 13, 1972 (Continued)

RESOLVED THAT the Academic Dean of the University cease his unauthorized practice of withholding tenure approval for a faculty member until the faculty member has served the University a minimum of 4 consecutive academic years. Be it further

RESOLVED THAT the Academic Dean of the University routinely seek the opinion of the University Counsel on issues raised concerning interpretation of a completed legal document, the Faculty Manual, and cease placing the Faculty Senate in the position of having to disclaim his unauthorized amendments to that document."

Professor Harrison moved to table the motion. After a second the "motion to table" carried 11 to 9.

Professor Harrison then presented a motion that the Faculty Senate go on record as asking who has the final authority for interpreting the faculty manual. After a second, the motion carried unanimously.

Professor Sawyer then presented the following motion:

"WHEREAS, the Faculty Senate hereby goes on record that the word consecutive was not intended to be included in the four year requirement for tenure, be it

RESOLVED THAT the Faculty Senate's interpretation of the four year requirement for tenure, as being without any necessity for consecutive service, be applied uniformly, effective immediately."

The motion, after a second carried unanimously.

The meeting was adjourned at 6:25 p.m.

Absent from meeting: N. D. Campter, J. R. Hill, W. E. Johnston, T. E. Skelton, D. O. Ezell, A. R. Abernathy, W. Baron, E. A. Freeman, W. F. Steirer, F. B. Brown, W. T. Wallenius.

Visitors: Lynda W. Skelton and Margaret K. Rice, both members of the Off Campus Faculty Council.

COOPERATIVE EDUCATION

Clemson University has established a Cooperative Education Program following a two-year feasibility study which was conducted by S. M. Willis (Dean, Univ Ext), B. J. Todd (Prof, IM), W. L. Ball (Assoc Prof, E&CE), and R. A. Banister (Assoc Prof, Coord OIMR). The first year of operation will be partially funded by the Office of Education, U. S. Department of Health, Education, and Welfare.

The Dean of University Extension announces the appointment of Professor R. A. Banister as Director of Cooperative Education.

Professor Banister joined the faculty of the College of Engineering in 1946 as an instructor of Engineering Graphics and rose to the rank of Associate Professor. When the College of Engineering established the Office of Industrial and Municipal Relations in 1966, he was appointed Coordinator. He was also appointed Director of Continuing Engineering Education. Numerous seminars, workshops, short courses, symposiums, and conferences were offered by the College of Engineering as a public service to the State of South Carolina under his leadership.

Professor Banister brings to the Co-op Program a wealth of experience in teaching, student advising, administration, and relationships with business, industry, and agency.

AGRICULTURAL ENGINEERING

B. K. Webb (Prof) presented a paper entitled, "Correlations of Reflectance Ratios to Maturity for Whole Peaches," co-authored by John F. Long (former Grad Stu) at the 1972 annual meeting of the American Society of Agricultural Engineers held in Hot Springs, Ark., June 27-30.

C. L. Barth (Assoc Prof) presented a paper entitled, "Using Odor Intensity Limits in Air Quality Standards," at the 1972 annual meeting of the American Society of Agricultural Engineers held in Hot Springs, Ark., June 27-30.

J. R. Lambert (Prof) presented a paper entitled, "Dynamic Soil and Plant Water Potentials as Predicted by the Model TROIKA," at the 1972 annual meeting of the American Society of Agricultural Engineers held in Hot Springs, Ark., June 27-30.

A. W. Snell (Dept Hd and Southeast Dir ASAE) participated in activities of the Board of Directors, of which he is a member; attended Regional Council meeting and Department Heads' meeting at the 1972 annual meeting of the American Society of Agricultural Engineers, Hot Springs, Ark., June 27-30.

CHEMISTRY

A. R. Pinder (Prof), S. J. Price and R. M. Rice (former Grad Stu) recently published a paper entitled, "Synthesis of the Spiro[4.5]decane System. An Approach to the Acorane Sesquiterpene Group," in the Journal of Organic Chemistry, vol. 37, page 2202, 1972.

Two high school seniors are participating in chemistry research for a ten-week period during the summer, sponsored by the American Chemical Society's Project Catalyst. Funds for the project are provided through the ACS by participating chemical industries. The participants are Mr. Bobby Joe Poole, Seneca, and Miss Bobby Jean Wiley, Pendleton. They are contributing to the student-initiated project, A Study of Water Pollution Along the Chattooga and Tugaloo Rivers, sponsored by the National Science Foundation.

CHEMICAL ENGINEERING

F. C. Alley (Prof) presented a paper entitled, "Adsorption of Reduced Sulfur Gases on Activated Carbon," at the 65th annual meeting of the Air Pollution Control Association, Miami, Fla., June 20.

D. F. Bruley (Prof) presented a seminar on "Systems Studies in Microcirculation," at Auburn University in May.

D. F. Bruley attended a one week short course on Minicomputer Programming (Nova 1220) at the Data General Corporation in Southboro, Mass., June 19-23.

D. F. Bruley visited laboratories at the Max Planck Institute of Applied Physiology at Dortmund, West Germany and presented a seminar on "Simulations in Microcirculation" on June 25-28.

D. F. Bruley had published, "The Effect of Microcirculation Changes on Brain Tissue Oxygenation," in the Journal of Physiology, 217:689-707. (1971) with H. I. Bicher, M. H. Knisely and D. D. Reneau.

COLLEGE OF ENGINEERING

L. G. Rich (Dean) is a member of the U.S. Army Mobility Equipment Command Scientific Advisory Group which met at Fort Belvoir, Va., on July 19-21.

ELECTRICAL AND COMPUTER ENGINEERING

L. C. Wilcox (Assoc Dean) has been asked by the National Science Foundation to serve on the review panel for proposals submitted for consideration under the Cooperative College-School Science Program. This program funds projects which will encourage and enhance cooperative programs between elementary and secondary school systems and universities in the areas of science, mathematics, and social sciences. Dr. Wilcox is presently director of such a program at Clemson and has served as an invited guest of NSF in several institutes and meetings related to the program.

GEOLOGY

Villard S. Griffin (Assoc Prof) recently published a paper entitled, "Inner Piedmont Belt of the Southern Crystalline Appalachians," in the Geological Society of America Bulletin, vol. 83, p. 1897, 1972.

MATHEMATICAL SCIENCES

J. V. Brawley, Jr. (Prof), a Visiting Lecturer for the Mathematics Association of America, visited Macon Junior College, Macon, Ga. on Apr. 13-14 and presented talks on "The Gambler's Ruin," and "Elementary Algebraic Cryptography."

John Kenelly (Prof and Hd) served June 9-16 at Princeton, N.J. as examination leader for the Educational Testing Services, Advanced Placement examination on AB-Calculus.

T. G. Proctor (Assoc Prof) will be associated with Brown University as a Visiting Associate Professor of Mathematics while on sabbatical leave during the 1972-73 academic year.

Robert E. Fennell (Asst Prof) was selected as one of 30 participants to attend the Summer Institute, "Deterministic Methods in Operations Research," conducted at Cornell University in Ithaca, N.Y. from June 26-Aug. 4. This Summer Institute is funded by the National Science Foundation.

MUSIC

Edith B. Card (Instr) presented a program of Appalachian folk songs with the plucked dulcimer at High Hampton Inn on July 5 and at Table Rock State Park on July 12.

MUSIC (Continued)

Edmund W. Winston (Instr) participated in the annual two-week band camp at Furman University, June 18-30, where he taught music theory and private woodwind lessons, and directed three bands composed of over 200 students from junior and senior high schools throughout the state of South Carolina.

POLITICAL SCIENCE AND SOCIOLOGY

M. W. Slann (Asst Prof) has published "Tolstoy and the Beginnings of Kibbutz Ideology," in Judaism: A Quarterly Journal of Jewish Social Life and Thought (Summer, 1972).

CALENDAR OF CAMPUS EVENTS

August 2-	Wed.-	Examinations.
August 3	Thurs.	
August 5	Sat.	Graduation, ROTC Commissioning.
August 9	Wed.	Marketing Seminar, College of IM&TS.
August 18	Fri.	8:00 a.m. Faculty and Staff Orientation - P&AS Auditorium.
August 19	Sat.	Individual College Orientation.

